

Requested Patent: WO0078557A1

Title:

DEFINING AND UPLOADING MULTIPLE TRANSACTION DESCRIPTIONS FROM A
CLIENT TO A TRANSACTION FACILITY ;

Abstracted Patent: WO0078557 ;

Publication Date: 2000-12-28 ;

Inventor(s):

KNEPFLE JOSHUA D (US); RATTERMAN ROBERT J (US); HELME PETER (US);
WILSON MICHAEL (US) ;

Applicant(s):

EBAY INC (US); KNEPFLE JOSHUA D (US); RATTERMAN ROBERT J (US); HELME
PETER (US); WILSON MICHAEL (US) ;

Application Number: WO2000US17136 20000621 ;

Priority Number(s): US19990140124P 19990621 ;

IPC Classification: B42D15/00; G06F17/60; H04L9/00; H04M11/00 ;

Equivalents: AU5756900 ;

ABSTRACT:

A method to facilitate uploading of a plurality of transaction descriptions (84) to a network-based transaction facility (10) utilizes a client-side (72) upload application (76) when executing, the upload application (76) presents an input interface (286) to receive a transaction description (84) (e.g. an auction listing or product offering), the transaction description (84) including a number of data items and the input interface (286) presenting a number of input fields to receive the data items. The upload application (76) automatically composes a data file including multiple transaction description (84) and transmits the data file from the client computer (74) to the network-based transaction facility (10) via a network.

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 December 2000 (28.12.2000)

PCT

(10) International Publication Number
WO 00/78557 A1

(51) International Patent Classification⁷: B42D 15/00,
G06F 17/60, H04L 9/00, H04M 11/00

(21) International Application Number: PCT/US00/17136

(22) International Filing Date: 21 June 2000 (21.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/140,124 21 June 1999 (21.06.1999) US

(71) Applicant (for all designated States except US): EBAY,
INC. [US/US]; 2125 Hamilton Avenue, San Jose, CA
95125 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KNEPFLE, Joshua,
D. [US/US]; 3363 Cleves Warsaw Pike, Cincinnati,

OH 45238 (US). RATTERMAN, Robert, J. [US/US];
4986 Cleves Warsaw Pike, Cincinnati, OH 45238 (US).
HELME, Peter [US/US]; 1515 Karl Avenue, Monte
Serenio, CA 95030 (US). WILSON, Michael [US/US];
24325 Glenwood Drive, Los Gatos, CA 95030 (US).

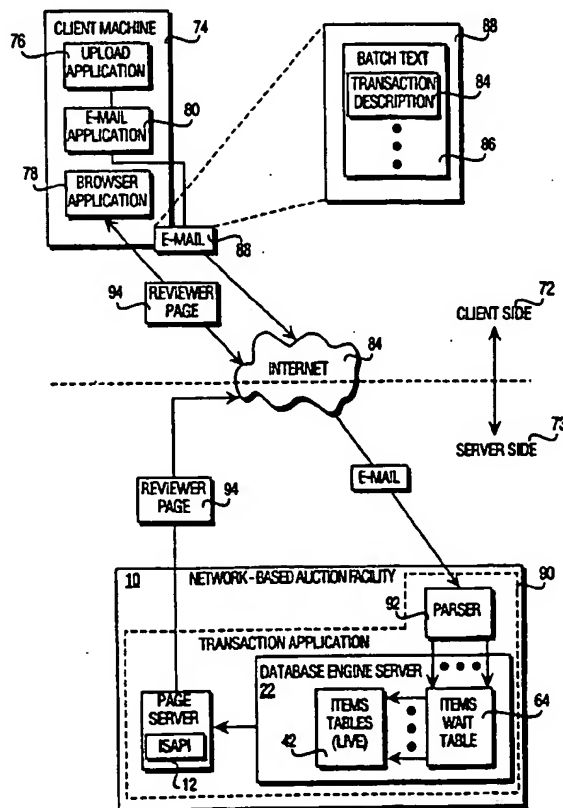
(74) Agents: MALLIE, Michael, J. et al.; Blakely, Sokoloff,
Taylor & Zafman LLP, 7th Floor, 12400 Wilshire Boule-
vard, Los Angeles, CA 90025 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian

[Continued on next page]

(54) Title: DEFINING AND UPLOADING MULTIPLE TRANSACTION DESCRIPTIONS FROM A CLIENT TO A TRANS-
ACTION FACILITY



(57) Abstract: A method to facilitate uploading of a plurality of transaction descriptions (84) to a network-based transaction facility (10) utilizes a client-side (72) upload application (76) when executing, the upload application (76) presents an input interface (286) to receive a transaction description (84) (e.g. an auction listing or product offering), the transaction description (84) including a number of data items and the input interface (286) presenting a number of input fields to receive the data items. The upload application (76) automatically composes a data file including multiple transaction description (84) and transmits the data file from the client computer (74) to the network-based transaction facility (10) via a network.

WO 00/78557 A1



patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

Published:

— *With international search report.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

DEFINING AND UPLOADING MULTIPLE TRANSACTION DESCRIPTIONS FROM A CLIENT TO A TRANSACTION FACILITY

The present application claims priority from U.S. provisional patent application number 60/140,124 entitled "METHOD OF DEFINING AND UPLOADING MULTIPLE AUCTIONS TO A NETWORK-HOSTED AUCTION FACILITY FROM A CLIENT APPLICATION", filed June 21, 1999.

FIELD OF THE INVENTION

The present invention relates generally to the field of network-based commerce and, more specifically, to a method and system to define and upload multiple transaction listings to a network-based transaction facility.

BACKGROUND OF THE INVENTION

With the wide spread acceptance of the Internet as a ubiquitous, interactive communication and interaction platform, on-line commerce conducted over the Internet has become commonplace in a variety of business environments. On-line commerce is traditionally categorized as business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer (C2C) and even business-to-employee (B2E) commerce. In the B2B environment, a number of online exchanges or marketplaces (e.g., vertical exchanges) have been established with a view to facilitating electronic commerce between parties, for example, within a vertical supply chain. Examples of such B2B exchanges include the PurchasePro exchange and the various exchanges operated by Ventro Corporation.

Such B2B exchanges typically provide a number of tools for facilitating commerce, such as aggregated and near real-time inventory information, Requests for Quotation (RFQ) capabilities and auctions.

In the B2C and C2C environments, a number of exchanges and auction facilities have proved popular. A leading on-line auction facility is operated by eBay, Incorporated. On-line auction facilities are also provided by Yahoo! Incorporated and Amazon.com. Further, a number of on-line services offer on-line classifieds, such as the Yahoo! Classifieds service offered by Yahoo! Incorporated.

A number of the on-line auction facilities are utilized by merchants as an important, if not a primary, distribution channel for products. Such so-called "power users" typically place a large number of items up for auction each day. Further, various retailers and merchants also utilize free, or low-cost, classified advertisement services offered on the Internet, such as Yahoo! Classifieds. For example, a used-car sales operation may, at any time, place a number of such classified advertisements via an on-line classified advertisement service.

SUMMARY OF THE INVENTION

According to the invention there is provided a method to facilitate uploading of a plurality of transaction descriptions to a network-based transaction facility. At a client computer, an upload application is executed to present an input interface to receive a transaction description, the transaction description comprising a plurality of data items and the input interface presenting a plurality of input fields to receive the plurality of data items. At the client computer, the upload application is executed automatically to compose a data file including a plurality of transaction descriptions. At the client computer, the upload application

is executed to propagate the data file from the client computer to the network-based transaction facility via a network.

Other features of the present invention will be apparent from the accompanying drawings and from the detailed description that follows.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is illustrated by way of example and not limitation in the figures of the accompanying drawings, in which like references indicate similar elements and in which:

Figure 1 is a block diagram illustrating an exemplary network-based transaction facility, according to one embodiment of the present invention.

Figure 2 is a database diagram illustrating an exemplary database maintained and accessed by a database engine server of the network-based transaction facility.

Figure 3 is a block diagram illustrating a network-based transaction environment, according to an exemplary embodiment of the present invention including a client-side and a server-side.

Figure 4 is a flow chart illustrating a method, according to an exemplary embodiment of the present invention, of facilitating the composition and uploading of multiple transaction descriptions from a client machine to a server machine via a network.

Figure 5 is a flow chart illustrating a method, according to an exemplary embodiment of the present invention, of downloading an upload application from a network-based transaction facility to a client machine.

Figure 6 is a flow chart illustrating a method, according to an exemplary embodiment of the present invention, of defining a collection

of transaction descriptions.

Figure 7 illustrates an exemplary input dialog box, according to one embodiment of the present invention.

Figure 8 illustrates an exemplary main window to present a list and summary of transaction descriptions that constitute a defined collection.

Figure 9 illustrates an exemplary upload dialog box into which a user may provide a user name and password.

Figure 10 illustrates an exemplary e-mail format for batch text composed by an upload application, according to an exemplary embodiment of the present invention.

Figure 11 is a flow chart illustrating a method, according to an exemplary embodiment of the present invention, of processing multiple transaction descriptions as received at a network-based transaction facility.

Figures 12A - 12I illustrate a series of interfaces that may be presented to a user by a network-based transaction facility so as to allow the viewing, editing, previewing and confirmation of collections of transaction descriptions and of individual transaction descriptions.

Figures 13A - 13C provide a diagrammatic representation of a database structure, as may be maintained by the database engine server of a network-based transaction facility, according to an exemplary embodiment of the present invention.

Figure 14 is a class diagram illustrating classes, according to an exemplary embodiment of the present invention, that may be embodied within a client application to support functionality of the present invention.

Figure 15 is a diagrammatic representation of a machine, in the

exemplary form of a computer system within which a set of instruction, for causing the machine to perform any one of the methodologies discussed above, may be executed.

DETAILED DESCRIPTION

A method and system to define and upload multiple transaction descriptions to a network-based transaction facility are described. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be evident, however, to one skilled in the art that the present invention may be practiced without these specific details.

The term "participant" shall be taken to refer to any entity, human or automated, that contributes to, or participates in, a transaction, communication or process.

The term "transaction" shall be taken to mean any communication between two or more parties with a view to establishing a business agreement, exchange of value or a commercial relationship. Accordingly, the word "transaction" shall be deemed to cover, but not be limited to, a purchase-and-sale transaction established as a result, for example, of the placement of an advertisement or as a result of the conclusion of an auction process, the auction process being conducted on -line or otherwise.

Figure 1 is block diagram illustrating an exemplary network-based transaction (or commerce) facility in the form of a network-based auction facility 10. While an exemplary embodiment of the present invention is described within the context of an auction facility, it will be appreciated by those skilled in the art that the invention will find application many different types of computer-based, and network-based,

commerce or transaction facilities. For example, the present invention may be applied to an on-line classified advertisement service, a network-based exchange (e.g., a B2B exchange) or other on-line marketplace.

The auction facility 10 includes one or more of a number of types of front-end servers, namely page servers 12 that deliver web pages (e.g., markup language documents), picture servers 14 that dynamically deliver images to be displayed within Web pages, listing servers 16, CGI (or ISAPI) servers 18 that provide an intelligent interface to the back-end of facility 10, and search servers 20 that handle search requests to the facility 10. E-mail servers 21 provide, *inter alia*, automated e-mail communications to users of the facility 10.

The back-end services include a database engine server 22, a search index server 24 and a credit card database server 26, each of which maintains and facilitates access to a respective database. The back-end is also shown to include a number of administrative applications or functions 28.

The network-based auction facility 10 may be accessed by a client program 30, such as a browser (e.g., the Internet Explorer distributed by Microsoft Corp. of Redmond, Washington) that executes on a client machine 32 and accesses the facility 10 via a network such as, for example, the Internet 34.

Figure 2 is a database diagram illustrating an exemplary database 23, maintain by and accessed via the database engine server 22, that at least partially implements and supports the auction facility 10. The database 23 is a relational database, and includes a number of tables having entries, or records, that are linked by indices and keys. Central to the database 23 is a user table 40, which contains a record for each user of the auction facility 10. A user may operate as a seller, buyer, or both,

within the auction facility 10. The database 23 also includes item tables 42 that may be linked to the user table 40. Specifically, the tables 42 include a seller items table 44 and data items table 46. A user record in the user table 40 may be linked to multiple items that are being, or have been, auctioned via the facility 10, a link indicating whether the user is a seller or a bidder (or buyer) with respect to items for which records exist within in the item tables 42. The database 23 also includes a note table 48 populated with note records that may be linked to one or more item records within the item tables 42 and/or to one or more user records within the user table 40. Each note record within the table 48 may include, *inter alia*, a comment, description, history or other information pertaining to an item being auction via the auction facility 10, or to a user of the auction facility 10.

A number of other tables are also shown to be linked to the user table 40, namely a user past aliases table 50, a feedback table 52, a bids table 54, an accounts table 56, and an account balances table 58.

To enable one embodiment of the present invention, the database 23 is also shown to include a batch table 60, a batch items table 62 and an items wait table 64. Further details regarding the database tables 60 - 64 are provided below.

The present invention relates to a method and system for assisting in the communication of multiple transaction descriptions (e.g., offers for sale, auctions, listings) to a network-based transaction facility. In one embodiment, an executable upload application 76 is installed and executed on a client computer with a view to assisting a user in uploading multiple transaction descriptions to a network-based transaction facility. The upload application 76 thus operates as a client application, and provides a number of user interfaces and other

functionality to assist a user in defining multiple transaction descriptions in a convenient manner. The upload application 76 also operates to compose a data file that includes the multiple transaction descriptions, and to upload such a data file as a single transmission to a network-based transaction facility. The uploading of such a single data including multiple transaction descriptions is advantageous in that it reduces the number of interactions between a client machine and the network-based transaction facility and the amount of time that a client machine has to be connected to a network (i.e., be "on-line").

As the upload application 76 is executable on the client-side, it is further advantageous in that it allows a user to compose multiple transaction listings in an "off-line" manner (e.g., without necessarily establishing any network communications or session with a network-based transaction facility), and then to upload such multiple transaction descriptions to the transaction facility as the above-mentioned single data file transmission. This is particularly advantageous for users that connect to a network utilizing a dial-up modem, as the composition and uploading of multiple transaction descriptions does not require the user's telephone line to be continually dedicated to a network connection during the composition and uploading of multiple transaction descriptions.

A further advantage of a client-side executable upload application is that improved functionality can be delivered at the client-side. Specifically, client-side executable applications often provide advanced interface functionality, examples of which are provided below (e.g., the use of templates to pre-populate fields and the verification of input information prior to upload to a network-based transaction facility).

On the server-side, one embodiment of the present invention

discloses the parsing and verification of multiple transactions as received from the upload application by the network-based transaction facility. Further, one embodiment of the present invention discloses server-side facilitated viewing, editing and confirmation of multiple transaction listings by a user, and also the committing of such multiple transaction descriptions to an active state to initiate multiple transaction processes facilitated by the network-based transaction facility.

Figure 3 is a block diagram illustrating a network-based transaction environment 70, according to an exemplary embodiment of the present invention, the environment 70 including a client-side 72 and a server-side 73. On the client-side 72, a client machine 74 (e.g., a personal computer, Personal Digital Assistant (PDA), cellular telephone or any other network device) is shown to host an upload application 76, a browser application 78 and an e-mail application 80. The client computer 74 is coupled to a network in the exemplary form of the Internet 82, or any Local Area Network (LAN) or Wide Area Network (WAN). The upload application 76, in one embodiment, presents a number of user interfaces to a user for the purposes of harvesting multiple transaction descriptions 84. The upload application 76 further composes batch text 86 that embodies the multiple transaction descriptions 84 inputted via the multiple interfaces. The upload application 76 then interacts with the e-mail application 80 to compose an electronic mail (e-mail) message 88 that embodies the batch text 86. The batch text 86 is communicated to the network-based auction facility 10 by the e-mail application 80 as the e-mail message 88. Specifically, the e-mail application 88 utilizes any one of a number of electronic e-mail or messaging protocols (e.g., Simple Mail Transport Protocol (SMTP)) to communicate the e-mail message 88 over the Internet 82. It will of course be appreciated, in alternative

embodiments, the batch text 86 may be communicated to the network-based auction facility 10 by any one of a number of other protocols (e.g., the File Transport Protocol (FTP)).

Turning to the server-side 73, the network-based transaction facility, in the exemplary form of the auction facility 10, is shown to execute a transaction application 90 that includes a parser 92. The parser 92 operates to parse a received e-mail message 88 to extract the multiple transaction descriptions 84 from the batch text 86 included within the e-mail 88. The parser 92 may also perform various format, content and verification operations, as will be described in further detail below. The parser 92 then populates the items wait table 64, as maintained by the database engine server 22, with the extracted transaction descriptions 84. From the items wait table 64, the transaction descriptions 84 are transferred to the live items table 42, following user confirmation in the manner described below.

The transaction application 90 further encompasses the page server 112, which in one exemplary embodiment, includes an Internet Server Application Program Interface (ISAPI) where the page server 112 comprises the Internet Information Server, a web server developed by Microsoft Corporation of Redmond, Washington. In an alternative embodiment, the page server 112 may execute a Common Gateway Interface (CGI) program. The page server 112 operates dynamically to generate markup language documents (e.g., web pages) utilizing content retrieved from the database engine server 22, and to communicate such markup language documents via the Internet 82 to the client application 74 for viewing utilizing the browser application 78. In one embodiment, the page server 12 serves up a reviewer page 94, embodying a list of multiple transaction descriptions 84 successfully extracted by the parser

92 from the e-mail message 88 for display within the browser application 78. This is done for the purposes of allowing a user to view, edit, and confirm such transaction descriptions 84 before they are communicated to the live items table 42 from the items wait table 64.

Figure 4 is a flow chart illustrating method 100, according to an exemplary embodiment of the present invention, of facilitating the composition and uploading of multiple transaction descriptions from a client machine to a server machine via a network. In an exemplary embodiment where the transaction facility comprises the network-based auction facility 10, the transaction descriptions define the parameters and content of an on-line auction process. Nonetheless, it will be appreciated that a transaction description may provide any transaction parameters (e.g., a product or service that is being offered for sale by any methodology, or a product service requirement description). Specifically, in an alternative embodiment, the transaction descriptions may describe a product or service being offered by way of a classified advertisement or that has been offered or is required within the context of a B2B exchange or electronic marketplace.

The method 100 commences at block 102 at the download of the upload application 76 to a client machine 74, and the installation of the upload application 76 on the client machine 74.

At block 104, a user then creates a collection of transaction descriptions (e.g., auction listings) at the client machine 74 utilizing the upload application 76.

At block 108, the batch text 86, comprising the collection of transaction descriptions 84, is composed and propagated as the e-mail message 88 from the client machine 74 to the server side 73 via the internet 82.

At block 110, the e-mail 88 is received at the network-based facility 10.

At block 112, the parser 92 of the transaction application 90 parses the e-mail message 88 to extract the various transaction descriptions 84 embodied therein, and performs various verification operations with respect to each of the each of the extracted transaction descriptions 84.

At block 114, the transaction application 90 communicates a confirmation message to the client machine 74 to confirm successful receipt and extraction of the various transaction descriptions 84. In one embodiment, the confirmation message may comprise an e-mail message communicated from the e-mail service 21 of the network-based auction facility 10. In an alternative embodiment, the page server 12 may, responsive to a user request, generate a markup language document (e.g., a HTML document) that communicates the confirmation message to the user. The confirmation message communicated to the client machine 74 at block 114 may further include a location identifier (e.g., a Uniform Resource Locator (URL)) that provides a link to a listing of the collection of transaction descriptions extracted by the parser 92 at block 112.

In an alternative embodiment, the confirmation message itself may present such a list of transaction descriptions. For example, the confirmation message that is communicated via e-mail to the client machine 74 may comprise an HTML document that provides a list of transaction descriptions included within the collection.

At block 116, the user is presented with a number of interfaces that facilitate viewing and editing of the collection of transaction descriptions. In one embodiment, the various interfaces may be markup language documents that are generated by the page server 12 and communicated to the client machine 74 via the Internet 82 for viewing within the context

of the browser application 78. For example, such interfaces in the form of markup language documents may be invoked by user-selection, on the client-side, of a URL included within the confirmation message communicated at block 114. In an alternative embodiment, the interfaces presented at block 116 may be generated by the upload application 76 utilizing, for example, text and data communicated from the transaction application 90.

At block 118, the user, via an appropriate interface, elects to commit the transaction descriptions 94 to a transaction process facilitated by the network-based auction facility 10. For example, the user may elect to commit the collection the transaction descriptions 84 as auction processes to be commenced on a specified date and at a specified time.

At block 120, following commitment of the collection of transaction descriptions 84, the transaction application 90 may communicate an updated category data structure to the client machine 74, and specifically to the upload application 76. In one embodiment, the creation of the collection of transaction descriptions 84 may require a user to specify a category for transaction subject matter. It is useful for the upload application 76 to specify categories that are supported by the transaction application 90. Accordingly, the communication of the category data structure at block 120 serves to synchronize the categories that may be specified utilizing the upload application 76 with the subject matter categories that are supported by the transaction application 90. Specifically, the database 23 of the network-based auction facility 10 may include a categories table (not shown) that lists a set of subject matter categories according to which the subject matter of a transaction may be classified. Such classification of subject matter is important to facilitate the user searching and location of transaction descriptions that may be of

interest.

At block 122, the transaction application 90 may communicate an updated upload application 76) to the client machine 74. In one embodiment, the transaction application 90 may query an installed upload application 76 to determine a version number (or install date) thereof. This installed version number may be compared by the transaction application 90 to a current version number for the upload application 76, the current version number being the version number for the most recent version of the upload application 76. In the event that the current version of the upload application 76 is more recent than installed version, a user may be presented with the option of downloading the current version of the upload application 76. Specifically, an e-mail message may be communicated to the client machine 74 stating that a more recent version of the upload application 76 is available. The e-mail message would further include a location identifier (e.g., URL) that is user-selectable to commence initiation of the download of the client version of the upload application 76. In an alternative embodiment, the transaction application 90 may cause the upload application 76 to prompt a user to upgrade the version of the upgrade application 76. The user may then respond to this prompt to commence an upgrade process.

Figure 5 is a flow chart illustrating a method 102, according to an exemplary embodiment of the present invention, of downloading the upload application 76 from the network-based auction facility 10 to a client machine 74.

At block 130, the network-based auction facility 10 receives a request to upload the upload application 76. In one embodiment, this request may be received by user-selection of a hypertext link, or other location identifier, presented to the user within the context of a markup

language document displayed by the browser application 78.

At block 132, the network-based auction facility 10 further receives a user identifier for the requesting user. The user identifier is provided by the user via an interface, for example, presented to the user in the form of a markup language document displayed by the browser application 80.

At decision block 134, a determination is made by the auction facility 10 as to whether the requesting user maintains credit card details with the auction facility 10. Specifically, should the requesting user be a registered user of the auction facility 10, the auction facility 10 may during a registration process request the relevant user to provide details of a valid credit card.

At decision block 136, a determination is made by the auction facility 10 as to whether a negative feedback rating for the requesting user exceeds a predetermined minimum. Specifically, in one embodiment, the auction facility 10 provides a feedback mechanism by which users may provide feedback regarding other users with which they have transacted. Such a feedback mechanism is useful for establishing trust between users of the on-line auction facility 10, and also provides an indication of the trustworthiness and reliability of the user.

At decision block 138, a determination is made as whether the requested user has been a registered user of the on-line auction facility 10 for a predetermined time period. For example, should the requesting user have only been a registered user for a number of hours, or less than a week, insufficient time may have passed to establish the credibility, trustworthiness and reliability of the requesting user. Further, a user seeking to perpetrate a fraud utilizing the on-line auction facility 10 may register under an alias for the specific purposes of perpetrating such a

fraud. The check performed at block 138 seeks to reduce access to the upload application 76 by a user who has not been registered for a sufficient period of time so as to increase the probability of the detection of a fraudulent registration.

Following a negative determination at any one of decision blocks 134, 136 or 138, the method 102 denies the upload request at block 142. On the other hand, following positive determinations at each of decision blocks 134, 136 and 138, the auction facility 10, at block 140, proceeds to propagate the upload application 76 to the client machine 74 via the network 82.

The method 102 then terminates at block 144.

Figure 6 is a flow chart illustrating a method 104, according to an exemplary embodiment of the present invention, of defining a collection of transaction descriptions 84, such as for example, auction listings. In one embodiment, the method 104 is performed at the client-side by the stand-alone, executable upload application 76. In alternative embodiments, the method 104 may be executed by a client-side executable, such as a Java applet or an ActiveX control, that executes when the context of a browser application. The method 104 is advantageous in that intelligence resides on the client-side to facilitate the convenient entry of multiple transaction descriptions by, for example, providing templates that allow for a user to define repetitive content across multiple transaction listings so as to avoid requiring repetitive entry for each transaction listing. Further, the method 104 introduces client-side functionality to perform a verification operation on inputted data to check for allowable contents, and the legality of contents. Further, the method 104 proposes presenting lists for allowable contents, for example as drop-down menus, from which a user may select valid

contents for a particular field of a transaction description 84.

The method 104 commences at block 150 with the invoking of the upload application 76 on the client machine 74 of a user wishing to compose and upload multiple transaction descriptions to a network-based auction facility 10. For example, a "power-user" of the eBay auction facility may wish to upload multiple auction listings, thus invoke an upload application 76.

At block 152, the upload application 76 executes to present an input dialog box to receive a transaction description 84. The dialog box, in one embodiment, presents a number of fields that may be populated by the user to compose the transaction description 84. In one embodiment, the input dialog box presented at box 152 comprises an "add auction" dialog box 180, an exemplary embodiment of which is shown in Figure 7.

The "add auction" dialog box 180 is shown to include multiple input fields for receiving various data items to constitute an exemplary transaction description 84. These data items are broadly shown to comprise the description data items 182, pricing and quantity data items 184 and payment and shipping data items 186. An "enhance this item" button 188 is also presented so as to allow a user to specify that a particular transaction be visually or otherwise differentiated or highlighted when displayed by the network-based auction facility 10. For example, an auction listing derived from the transaction description 84 may be bolded, displayed with a particular background color, or have a graphic image or icon associated therewith.

To facilitate convenient navigation between multiple transaction descriptions 84 inputted by the "add auction" dialog box 182, "previous" and "next" buttons 190 and 192 are also displayed, user-selection of which

allows a user sequentially to progress through multiple inputted transaction listings.

A "clear" button 194 is also presented, user-selection of the button 194 operating to clear all data inputted into the various input fields of the "add auction" window 180.

Finally, a "finish" button is presented for user-selection to indication to indicate the conclusion of the input of the collection of multiple transaction descriptions 84.

At decision block 154, the upload application 76 makes a determination as to whether an input template has been created and defined for the relevant collection of transaction descriptions being inputted. Specifically, a template may be created by a user to contain data items for transactions that are common from transaction description to transaction description. For example, if all auctions in a particular collection can be paid for by Master Card, this data item may be entered into a template for automatic inclusion within each auction listing of the relevant collection.

Following a positive determination at decision block 154, at block 156, one or more fields of the input dialog box may be prepopulated with information retrieved from the appropriate template.

Following a negative determination at decision block 154, or following completion of block 156, at block 158, the user then inputs data items into the input dialog box. For example, the various fields of the "add auction" dialog box are populated manually by a user, or by user-selection of predetermined content from a presented list (e.g., a drop-down menu). For example, the "item category" 198 presented by the "add auction" dialog box 180 may be populated by user-selection of the drop icon 200, which then presents to the user a predetermined list of valid

categories. By selecting one of the categories presented in the drop-down menu, the "item category" field 198 is populated.

At block 158, the upload application 76 also checks each entered data item for legality and correct format. Merely, for example, inputs into "minimum bid" and "quantity" fields 202 and 204 will be checked by the upload application 76 to insure that the inputs are numeric values.

At decision block 160, a determination is made as to whether the user has selected the "next" button 192 to indicate an intention input of a further transaction description 84. At this point, the operate application 76 performs a verification check to determine whether the user has inputted sufficient data items to constitute a valid transaction description 84, or whether further information is required. For example, the user may inadvertently have forgotten to input a minimum bid into the field 202. Assuming the absence of any outstanding data items, following user-selection of the "next" button 192, the method 104 loops back to block 152 and again presents a fresh input dialog box. On the other hand, following a negative determination at decision block 160, a determination is made at decision block 162 whether the "finish" button 196 has been user-selected. If not, the method 104 loops back to block 158 on the assumption that the user wishes to input further data items. Following a positive determination at decision block 162, the method 104 progresses to block 164, where the upload application 76 presents a main window 200, an exemplary embodiment of which is shown in Figure 8. The main window 210 presents a listing summary of all transaction descriptions 84 that constitute the defined collection. Specifically, the main window 210 includes columns that display titles, quantity, minimum, reserve price and premium listing price in a tabular form to the user. A user may double-click on any of the rows of transaction listings presented in the

main window 210, which user-selection will be detected at decision block 166, causing the method 104 to loop back to block 104 where an input dialog box is displayed, the fields of the input dialog box being populated with data items for the selected transaction description 84.

At block 168, the user selects an upload option presented in association with the main window 200, responsive to which the upload application 76 prompts the user for a user name and password at block 170. In one exemplary embodiment, the prompting at block 170 is performed via a upload dialog box 212, such as that shown in **Figure 9** which includes input fields for the relevant user name and password.

At block 172, the user option may also be prompted for a date and time at which the relevant collection of transaction descriptions 84 should be posted by the network-based transaction facility. For example, the upload dialog box 212 shown in **Figure 9** is shown to include is shown to include a post date/time section 214 that allows a user to specify whether a collection of auction listings should be posted immediately, or posted on or after a specified date that the user may input. In the exemplary embodiment of the network-based auction facility 10, the "posting date" is the date on which a series of auctions are commenced based on the collection of auction listings.

At block 174, the user may then upload the collection of transaction descriptions 84, as a single data file composed by the upload application 76, to the network-based auction facility 10 by the selection of the "upload" button 216 presented within the upload dialog box 212.

In one embodiment, the collection of transaction descriptions 84 is, as described above, uploaded as batch text 86 embodied within an e-mail message 88 communicated, via an e-mail communication 80, from the client machine 74 to the network-based auction facility 10. In alternative

embodiments, the data file may be transferred via a non-e-mail protocol, such as MTP.

Figure 10 shows an exemplary e-mail formatting for the batch text 86, with tags utilized to demarcate and identify transaction descriptions 84, and data items within such transaction listing. For example, `<BULK_ITEM>` and `</BULK_ITEM>` tags 220 and 222 are utilized to demarcate discrete transaction descriptions 84. Within each discrete transaction description 84, various data items comprising the transaction description 84 are indicated and associated with appropriate titles. The tag delimiters and titles are, as will be described below, meaningful to the parser 92 of the network-based auction facility 10.

Figure 11 is a flow chart illustrating a method 230, according to an exemplary embodiment, of processing multiple transaction descriptions 84 as received at a network-based transaction facility, such as the network-based auction facility 10. Accordingly, the method 230 reflects, in one embodiment, activities performed on the server-side 73 of the transaction environment 70 illustrated in Figure 3. It will of course be appreciated that, in alternative embodiments, some will be described functionally may be moved to the client-side 72.

The method 230 commences at block 232 with the receipt of the batch text 86, for example in the form of the e-mail message 88, at the parser 92 of the network-based auction facility 10. The parser 92 processes the batch file 86 by recognizing the delimiter tags and titles discussed above with reference to Figure 10 to be thereby reconstruct a collection of multiple transaction descriptions, in an exemplary form of auction listings. More specifically, at block 234, the parser 92 instantiates a dedicated parsing process (or thread) for each batch text 86 received at the parser 92 by employing a dedicated parsing process for each batch

text 86, the simultaneous parsing of multiple batch text received at the parser 92 may be implemented. Further, implementation of multiple parsing processes enhances the scalability of the transaction application 90 to handle a relatively large volume of batch text 86 received at the network-based auction facility 10.

At block 236, for each batch text, 86 the user identifies for the sender of the batch text 86 is verified as being for a registered user of the network-based auction facility 10. Specifically, the parser 92 may, in one embodiment, extract an e-mail address of the sender embedded within the batch text 86 by the upload application 76. This e-mail address may be compared against an appropriate field within the user table 40 to identify the uploading user as being a registered user.

At block 238, the parser 92 may optionally verify the format of data items of the respective multiple transaction descriptions 84 as embodied within the batch text 84. The verification operation performed at block 238 provides an additional verification step over and above that implemented by the upload application 76, and serves to further provide a safeguard against data corruption during the transmission of the batch text 86.

At decision block 240, a determination is made as to whether an error has occurred either as a result of the user not being registered or a format inconsistency. If such an error is detected, at block 242, an e-mail message is communicated from the network-based auction facility 10, and specifically the e-mail servers 21 thereof, to the e-mail application 80 resident on the client machine 74 of the user. The e-mail communicated at block 242 specifies that the collection of transaction descriptions 84 has been rejected, and may optionally provide a reason for the rejection. For example, the e-mail message may specify that the relevant e-mail address

is not recognized as belonging to a registered user, or that a specific formatting error has been detected.

On the other hand, should no error be detected at decision block 240, the method 230 proceeds to block 244 where each transaction description 84 of a collection of transaction descriptions 84 is assigned a collection identifier that is common to all transaction descriptions within a particular collection, and a unique identifier that uniquely identifies each transaction description 84.

The operation performed at block 244 is performed with respect to each transaction description 84, a determination being made at decision block 266 after the processing of each transaction description 84 whether further transaction descriptions 84 exist within a particular collection (or batch). If so, at decision block 248, a determination is made as to whether more than a predetermined number (e.g., 500) of transaction descriptions 84 are present within a particular collection (or batch).

Following a positive determination at decision block 248, an error message, in the form of an e-mail, is again communicated to the sending user at block 242. Following a negative determination at decision block 248, the method 230 loops back to block 244, to assign a collection identifier and unique identifier to a further transaction description 84 within the relevant collection.

Should a determination be made at decision block 246 that no further transaction descriptions 84 exist within a particular collection, the method 230 proceeds to block 250 where the collection of transaction descriptions 84 is stored within the items wait table 64, maintained by the database engine server 22. Specifically, the items wait table 64 servers to hold the various transaction descriptions 84 pending confirmation thereof by the sending user.

At block 252, the transaction application 90 sends an e-mail message to the sending user, the e-mail message presenting a listing of the transaction descriptions 84, as discerned by the transaction application 90 from the batch text 86. In one embodiment, the e-mail presents a confirmation interface by including a URL that provides a link to a dynamically-generated markup language document (e.g., generated by the page server 12) that lists the collection of transaction descriptions 84 as stored within the items wait table 64. In one embodiment, the confirmation e-mail sent at block 252 includes a URL to a series of review interfaces that provide a submitting user with information regarding one or more collections of transaction descriptions 84 that have been submitted to network-based auction facility 10, and are being held in the items wait table 64 pending user confirmation or a user-specified live date. Further information regarding such an exemplary series of review interfaces is provided below with reference to **Figures 12A - 12H**.

At block 254, the transaction application 90 receives approval from a submitting user to commit one or more collections of transaction descriptions 84 to an active state (i.e., into a state wherein a transaction process within the parameters of the description commences) responsive to which, at block 256, the transaction application 90 commits the one or more collections from the items wait table 64 to the live items tables 42.

Figures 12A and 12B provide an exemplary embodiment of a "review collection summary" interface 286 that may be presented to a submitting user responsive to selection of a URL embodied, for example, within the confirmation e-mail message transmitted at block 252. Specifically, the interface 286 provides a tabulated list of collections of transaction descriptions 84 that are currently pending (i.e., not committed) within the network-based auction facility 10. Each of these

collections is identified by a respective collection identifier 294, and has delete, review and commit buttons 288, 290 and 292 associated therewith. The buttons 288, 290 and 292 are user-selectable to delete, review or commit an associated collection.

Figure 12C illustrates an exemplary embodiment of a "review collection" interface 300 that may be presented responsive to user-selection of the "review" button 290 associated with a collection listing displayed in the interface 286. The "review collection" interface 300 presents an "approve" button 302 that is user-selectable to approve an entire collection, and a "delete" button 304 that is user-selectable to delete the entire collection. A table for of each transaction description 84 within a respective collection is also provided, and "delete", "edit" " preview" buttons 306, 308 and 310 allow a user to perform respective operations with respect to transaction descriptions 84 on an individual basis.

Figure 12D illustrates an exemplary "approve and submit collection" interface 312 that may be invoked responsive to user-selection of the "commit" button 292, presented within the "review collection" summary interface 286 shown in **Figure 12A**. The interface 312 provides a tabulated listing of transaction descriptions 84 included within the relevant collection and an "approve" button 316 that is user-selectable to approve (or commit) the relevant collection.

Figure 12E illustrates a confirmation interface 320 that reports successful committing of a specified collection of transaction descriptions 84, for example responsive to user-selection of the "approve" button 316 shown in **Figure 12C**.

Figure 12E illustrates an exemplary "preview item" interface 322 that may be presented responsive to user-selection of the "preview" button 310 of the interface 300 shown in **Figure 12B**. The "preview item"

interface 322 presents to the submitting user a view of how the transaction description will actually be presented when a transaction process (e.g., an auction process) is commenced based on the transaction description 84. The "preview item" interface 322 is useful to provide the submitting user a final view of information that will be presented to a potential buyer accessing the network-based auction facility 10. Figures 12G - 12I display an exemplary "edit item" interface 324 that may be invoked responsive to user-selection of the "edit" button 308 within the "review collection" interface 300 illustrated in Figure 12B. The "edit item" interface 324 allows a user to edit and modify any of the data items included within a transaction description while the transaction description is pending within the items wait table 64, and before a transaction process based on the transaction description 84 goes "live".

Figures 13A - 13C provide further details regarding the database structure, maintained by the database engine server 22, to support the above-described methodologies.

At Figure 13A, the batch table 60 includes a record for each collection of transaction descriptions 84 as originally described, for example, within batch text 86 received at the network-based auction facility 10.

A one-to-many relationship exists between the batch table 60 and the batch items table 62, which contains transaction descriptions 84 extracted by the parser 92 from the batch text 86 into the database 32, but which have not as yet gone live.

The items wait table 64 stores loaded transaction descriptions 84 that are waiting to go live as described above. The items tables 42 stores records of the actual transaction descriptions 82 that have gone live by the initiation of the transaction process (e.g., an auction process or an

offer for sales prices) by the network-based auction facility 10.

Figures 13B and 13C illustrate an entity relationship diagram providing further details regarding the fields that are supported by the batch, batch items, items wait, items, user and related tables.

Figure 14 is a class diagram illustrating classes, according to an exemplary embodiment, that may be provided on the client-side to support the above-described functionality. An auction class 340 contains the information regarding a transaction (e.g., an auction) that is needed by the server-side to commence a transaction process. Specifically, the auction class includes title, description, features of auction, category number, minimum bid, quantity, payment and shipping options and other data. The auction class 340 may also contain functions to save itself and read necessary information from a binary file.

An auction collection class 342 operates as a container class for a number of auction class data members. An auction collection is represented by the auction collection class. In addition to all the auctions contained in this class, the auction collection class 342 also contains the date on which a collection was last uploaded so that the number of collections uploaded within a predetermined time period may be limited (e.g., once every twenty-four hour period). The auction class 342 also embodies a function to save the collection. Specifically, when saving a collection, the auction collection class 342 calls a save function of each of its member auction classes 340. It also saves the following information to a file:

1. The version of the upload application that saved the relevant collection;
2. The version of a predetermined list (e.g., category list) utilized to create a transaction description;

3. A submitting seller's user name and password;
4. The date and time to post the transactions described in the collection of transaction descriptions; and
5. The date on which the relevant collection of transaction descriptions was last uploaded.

All information may, in one embodiment, be saved utilizing the Visual Basic Function (Put) and may be read back from the relevant file utilizing the function (Get).

When a collection is uploaded to the network-based transaction facility, the relevant data file is simply saved to a random file name and communicated to the network-based transaction facility as an e-mail or utilizing FTP.

Figure 15 shows a diagrammatic representation of machine in the exemplary form of a computer system 350 within which a set of instructions, for causing the machine to perform any one of the methodologies discussed above, may be executed. In alternative embodiments, the machine may comprise a network router, a network switch, a network bridge, Personal Digital Assistant (PDA), a cellular telephone, a web appliance or any machine capable of executing a sequence of instructions that specify actions to be taken by that machine.

The computer system 350 includes a processor 352, a main memory 354 and a static memory 356, which communicate with each other via a bus 358. The computer system 350 may further include a video display unit 360 (e.g., a liquid crystal display (LCD) or a cathode ray tube (CRT)). The computer system 350 also includes an alpha-numeric input device 362 (e.g. a keyboard), a cursor control device 364 (e.g. a mouse), a disk drive unit 366, a signal generation device 368 (e.g. a speaker) and a network interface device 370.

The disk drive unit 366 includes a machine-readable medium 372 on which is stored a set of instructions (i.e., software) 374 embodying any one, or all, of the methodologies described above. The software 374 is also shown to reside, completely or at least partially, within the main memory 354 and/or within the processor 352. The software 374 may further be transmitted or received via the network interface device 370. For the purposes of this specification, the term "machine-readable medium" shall be taken to include any medium which is capable of storing or encoding a sequence of instructions for execution by the machine and that cause the machine to perform any one of the methodologies of the present invention. The term "machine-readable medium" shall accordingly be taken to include, but not be limited to, solid-state memories, optical and magnetic disks, and carrier wave signals.

Thus, a method and system to define and upload multiple transaction descriptoins to a network-based transaction facility have been described. Although the present invention has been described with reference to specific exemplary embodiments, it will be evident that various modifications and changes may be made to these embodiments without departing from the broader spirit and scope of the invention. Accordingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

CLAIMS

What is claimed is:

1. A method to facilitate uploading of a plurality of transaction descriptions to a network-based transaction facility, the method including:

at a client computer, executing an upload application to present an input interface to receive a transaction description, the transaction description comprising a plurality of data items and the input interface presenting a plurality of input fields to receive the plurality of data items;

at the client computer, executing the upload application automatically to compose a data file including a plurality of transaction descriptions; and

at the client computer, executing the upload application to propagate the data file from the client computer to the network-based transaction facility via a network.

2. The method of claim 1 wherein, at the client computer, the upload application presents a plurality of input interfaces to receive respective transaction descriptions of the plurality of transaction descriptions.

3. The method of claim 2 wherein the upload application presents navigation indicia to facilitate navigation between the plurality of input interfaces.

4. The method of claim 1 wherein the receiving of the transaction description and the composing of the data file are performed prior to establishing a network session between the client computer and the network-based transaction facility.

5. The method of claim 1 wherein the receiving of the transaction description includes determining whether an input template is designated for the transaction description and, if so, receiving at least one of the plurality of data items from the template into the transaction description.

6. The method of claim 1 wherein the upload application presents a list window displaying a list of the plurality of transaction description.

7. The method of claim 1 wherein the upload application performs a verification of the transaction description as received via the input interface.

8. The method of claim 7 wherein the upload application verifies a format of a first data item of the transaction description as received via the input interface.

9. The method of claim 7 wherein the upload application verifies legality of a first data item of the transaction description as received via the input interface.

10. The method of claim 7 wherein the upload application verifies contents of a first data item of the transaction description as received via the input interface.

11. The method of claim 10 wherein the contents of a first data item comprises a category indication, and the upload application determines whether the category indication is a valid category supported by the network-based transaction facility.

12. The method of claim 1 wherein the upload application presents an upload interface to receive user identification information.

13. The method of claim 1 wherein the upload application presents an upload interface to receive a date and time indication at which a transaction process associated with the transaction description becomes active on the network-based transaction facility.

14. The method of claim 1 wherein the transaction description at least partially describes an auction transaction.

15. The method of claim 14 wherein the plurality of data items include any one of a group including a subject matter description, a graphic, a category description, an accepted payment description, a shipping description, a subject matter quantity description, a minimum

bid specification, an auction duration specification, a reserve price specification, and a visual enhancement specification.

16. The method of claim 1 wherein the upload application automatically composes the data file as an e-mail message to be communicated to an e-mail address associated with the network-based transaction facility.

17. The method of claim 16 wherein the upload application propagates the e-mail message from the client computer to the network-based transaction facility via an e-mail transport protocol.

18. The method of claim 1 wherein the transaction description includes a category description of a category of subject matter of a transaction specified by the transaction description and wherein the input interface presents a list of categories for user-selection and incorporation into the transaction description as the category description.

19. The method of claim 18 wherein the input interface presents the list of categories as a drop-down menu.

20. The method of claim 1 including receiving, via the network at the client computer from the network-based transaction facility, a category data file specifying subject categories supported by the network-based transaction facility.

21. The method of claim 1 including determining an installed version indication for the upload application at the client computer,

performing a check to determine if a current version is more recent than the installed version of the upload application and, if so, presenting a user with the option of replacing the installed version of the upload application with the current version of the upload application.

22. The method of claim 1 including receiving at the client computer a confirmation message that the data file has been successfully received by the network-based transaction facility.

23. The method of claim 1 including receiving at the client computer an error message generated by the network-based transaction facility that the data file includes at least one error.

24. The method of claim 22 wherein the confirmation message presents a confirmation interface listing transactions successfully received by the network-based transaction facility.

25. The method of claim 24 wherein the presenting of the confirmation interface comprises presenting a location identifier to a remotely-generated interface.

26. The method of claim 25 wherein the remotely-generated interface comprises a markup language document.

27. The method of claim 24 wherein the confirmation interface facilitates editing of the transaction description as included in the data file received by the network-based transaction facility.

28. The method of claim 24 wherein the confirmation interface facilitates committing of a transaction described by the transaction description to an active state by the network-based transaction facility.

29. The method of claim 24 wherein the confirmation interface facilitates a preview of a transaction posting by the network-based transaction facility based on the transaction description.

30. A system to facilitate uploading of a plurality of transaction descriptions to a network-based transaction facility, the system including:

a communications application; and

an upload application to present an input interface to receive a transaction description, the transaction description comprising a plurality of data items and the input interface presenting a plurality of input fields to receive the plurality of data items; to compose a data file including a plurality of transaction descriptions; and to propagate the data file from the client computer to the network-based transaction facility via a network utilizing the communications application.

31. The system of claim 40 wherein the upload application is present a plurality of input interfaces to receive respective transaction descriptions of the plurality of transaction descriptions.

32. The system of claim 31 wherein the upload application is to present navigation indicia to facilitate navigation between the plurality of input interfaces.

33. The system of claim 30 wherein the upload application is to receiving of the transaction description and to compose the data file prior to establishing a network session between the client computer and the network-based transaction facility.

34. The system of claim 30 wherein the upload application is to determine whether an input template is designated for the transaction description and, if so, to receive at least one of the plurality of data items from the template into the transaction description.

35. The system of claim 30 wherein the upload application is to present a list window displaying a list of the plurality of transaction descriptions.

36. The system of claim 30 wherein the upload application is to perform a verification of the transaction description as received via the input interface.

37. The system of claim 36 wherein the upload application is to verify a format of a first data item of the transaction description as received via the input interface.

38. The system of claim 36 wherein the upload application is to verify legality of a first data item of the transaction description as received via the input interface.

39. The system of claim 36 wherein the upload application is to verify contents of a first data item of the transaction description as received via the input interface.

40. The system of claim 39 wherein the contents of a first data item comprises a category indication, and the upload application is to determine whether the category indication is a valid category supported by the network-based transaction facility.

41. The system of claim 30 wherein the upload application is to present an upload interface to receive user identification information.

42. The system of claim 30 wherein the upload application is to present an upload interface to receive a date and time indication at which a transaction process associated with the transaction description becomes active on the network-based transaction facility.

43. The system of claim 30 wherein the transaction description at least partially describes an auction transaction.

44. The system of claim 43 wherein the plurality of data items include any one of a group including a subject matter description, a graphic, a category description, an accepted payment description, a shipping description, a subject matter quantity description, a minimum

bid specification, an auction duration specification, a reserve price specification, and a visual enhancement specification.

45. The system of claim 30 wherein the upload application is to automatically compose the data file as an e-mail message to be communicated to an e-mail address associated with the network-based transaction facility.

46. The system of claim 45 wherein the upload application is to propagate the e-mail message from the client computer to the network-based transaction facility via an e-mail transport protocol.

47. The system of claim 30 wherein the transaction description includes a category description of a category of subject matter of a transaction specified by the transaction description and wherein the input interface is to present a list of categories for user-selection and incorporation into the transaction description as the category description.

48. The system of claim 47 wherein the input interface presents the list of categories as a drop-down menu.

49. The system of claim 30 wherein the upload application is to receive a category data file specifying subject categories supported by the network-based transaction facility.

50. The system of claim 30 wherein the upload applications is to receive a confirmation message that the data file has been successfully received by the network-based transaction facility.

51. The system of claim 30 wherein the upload application is to receive an error message generated by the network-based transaction facility that the data file includes at least one error.

52. The system of claim 50 wherein the confirmation message presents a confirmation interface listing transactions successfully received by the network-based transaction facility.

53. A network-based transaction system comprising:

a user computer, coupled to a network, hosting an upload application to present an input interface to receive a plurality of transaction descriptions, each transaction description comprising a plurality of data items pertaining to a transaction facilitated by the network-based transaction facility and the input interface presenting a plurality of data fields to receive the plurality of data items; and

a transaction computer system, coupled to the network, hosting a transaction application to facilitate a transaction between a buyer and seller, the transaction application to receive a data file from the uploaded location via the network,

wherein the upload application receives the plurality of transaction descriptions via the input interface, composes the data file to include the plurality of transaction descriptions and communicates the data file to the transaction application via the network.

54. The network-based transaction system of claim 53 wherein the transaction application is to parse the data file to extract the plurality of transaction descriptions from there within.

55. The network-based transaction system of claim 53 wherein the upload application is to include a user identifier within the data file and the transaction application is to verify the user identifier as identifying a user registered to participate within the network-based transaction system.

56. The network-based transaction system of claim 53 wherein the transaction application is to verify the format of at least one of the plurality of data items included in each of the plurality of transaction descriptions.

57. The network-based transaction system of claim 53 wherein the transaction application is to communicate an error message to the user computer via the network if a verification operation performed by the transaction application with respect to the data file fails.

58. The network-based transaction system of claim 53 wherein the transaction application is to assign a common identifier to each of the plurality of transaction descriptions included within the data file.

59. The network-based transaction system of claim 53 wherein the transaction application is to assign a unique identifier to each of the plurality of transaction descriptions included within the data file.

60. The network-based transaction system of claim 53 wherein the transaction application is to determine whether the plurality of transaction descriptions included with the data file exceed a predetermined number of transaction descriptions.

61. The network-based transaction system of claim 60 wherein the transaction application, if the predetermined number of transaction descriptions is exceeded, is to communicate an error message to the user computer via the network.

62. The network-based transaction system of claim 53 wherein the transaction application is to communicate a confirmation message to the user computer via the network following a verification operation with respect to the plurality of transaction descriptions included within the data file.

63. The network-based transaction system of claim 62 wherein the confirmation message returns a confirmation interface listing a plurality of transactions to be facilitated by the network-based transaction system.

64. The network-based transaction system of claim 63 wherein the confirmation message includes a location identifier indicating a remote location from which the confirmation interface may be retrieved.

65. The method of claim 63 wherein the confirmation interface comprises a markup language document.

66. The network-based transaction system of claim 62 wherein the transaction application is to assign the plurality of transaction descriptions to a wait condition pending confirmation of the plurality of transaction descriptions by a user responsive to the confirmation message.

67. The network-based transaction system of claim 66 wherein the transaction application initiates a plurality of transaction processes responsive to the confirmation of the plurality of transaction descriptions by the user.

68. The network-based transaction system of claim 53 wherein each of the plurality of transaction descriptions describes an auction transaction and the transaction application is to facilitate a plurality of network-based auction processes of respective subject matters described in each of the transaction descriptions.

69. A machine-readable medium storing a sequence of instructions that, when executed by a machine, cause the machine to:

present an input interface to receive a transaction description, the transaction description comprising a plurality of data items and the input interface presenting a plurality of input fields to receive the plurality of data items;

automatically compose a data file including a plurality of transaction descriptions; and

propagate the data file from the client computer to the network-based transaction facility via a network.

70. A system to facilitate uploading of a plurality of transaction descriptions to a network-based transaction facility, the system including:

communications means for communicating a data file; and

collection means for presenting an input interface to receive a transaction description, the transaction description comprising a plurality of data items and the input interface presenting a plurality of input fields to receive the plurality of data items; for composing a data file including a plurality of transaction descriptions; and for propagating the data file from the client computer to the network-based transaction facility via a network utilizing the communications means.

1/24

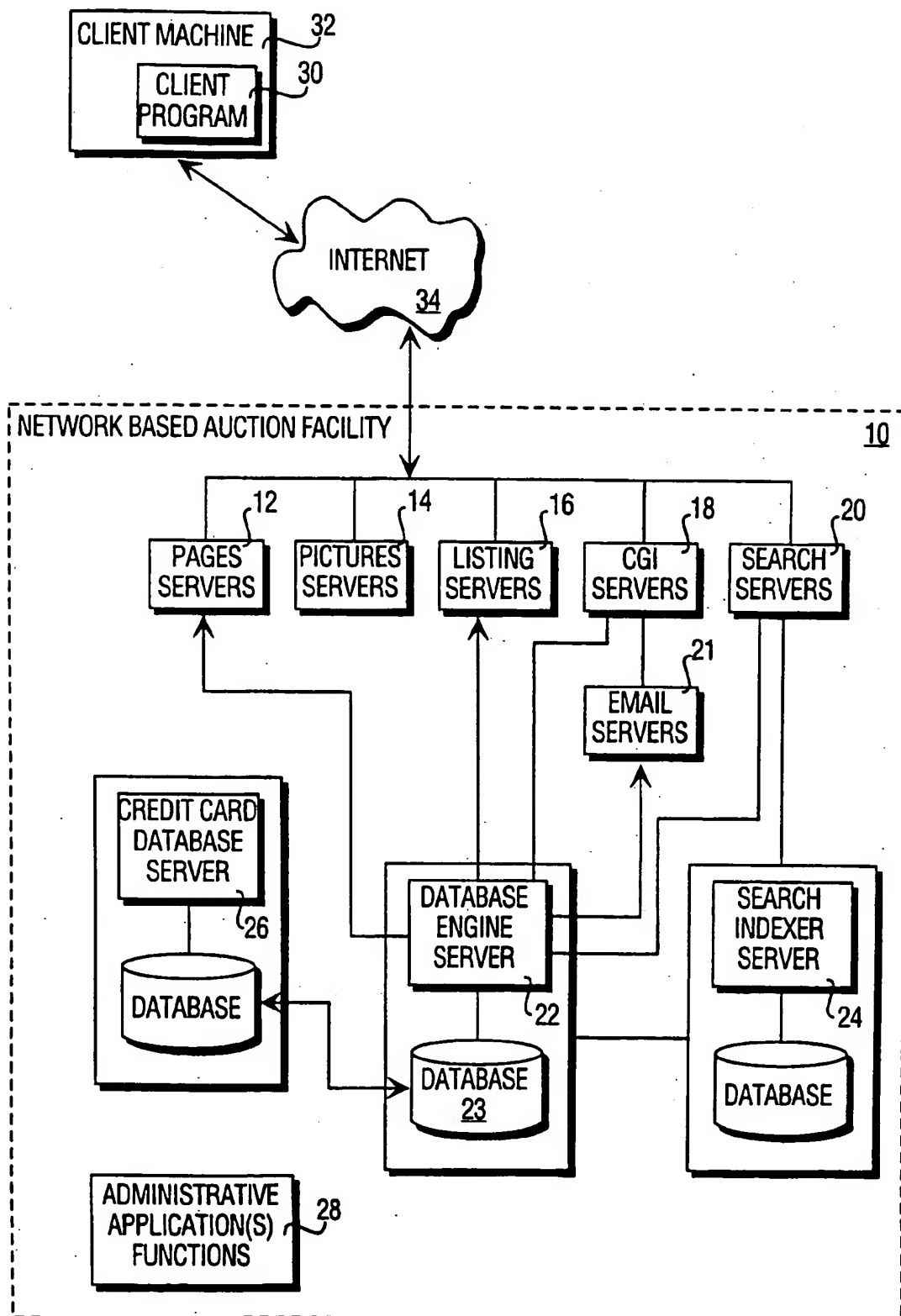


FIG. 1

2/24

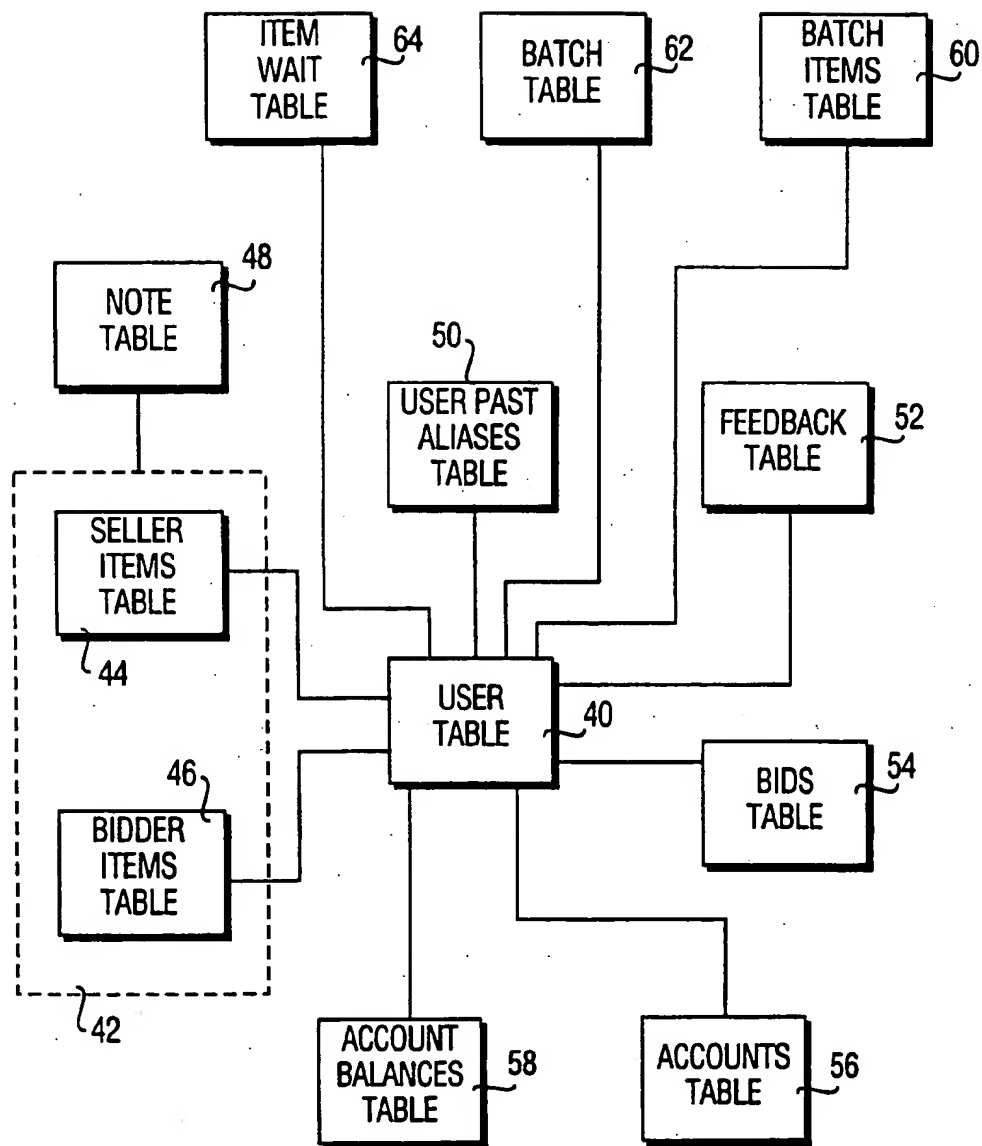
23
↙

FIG. 2

3/24

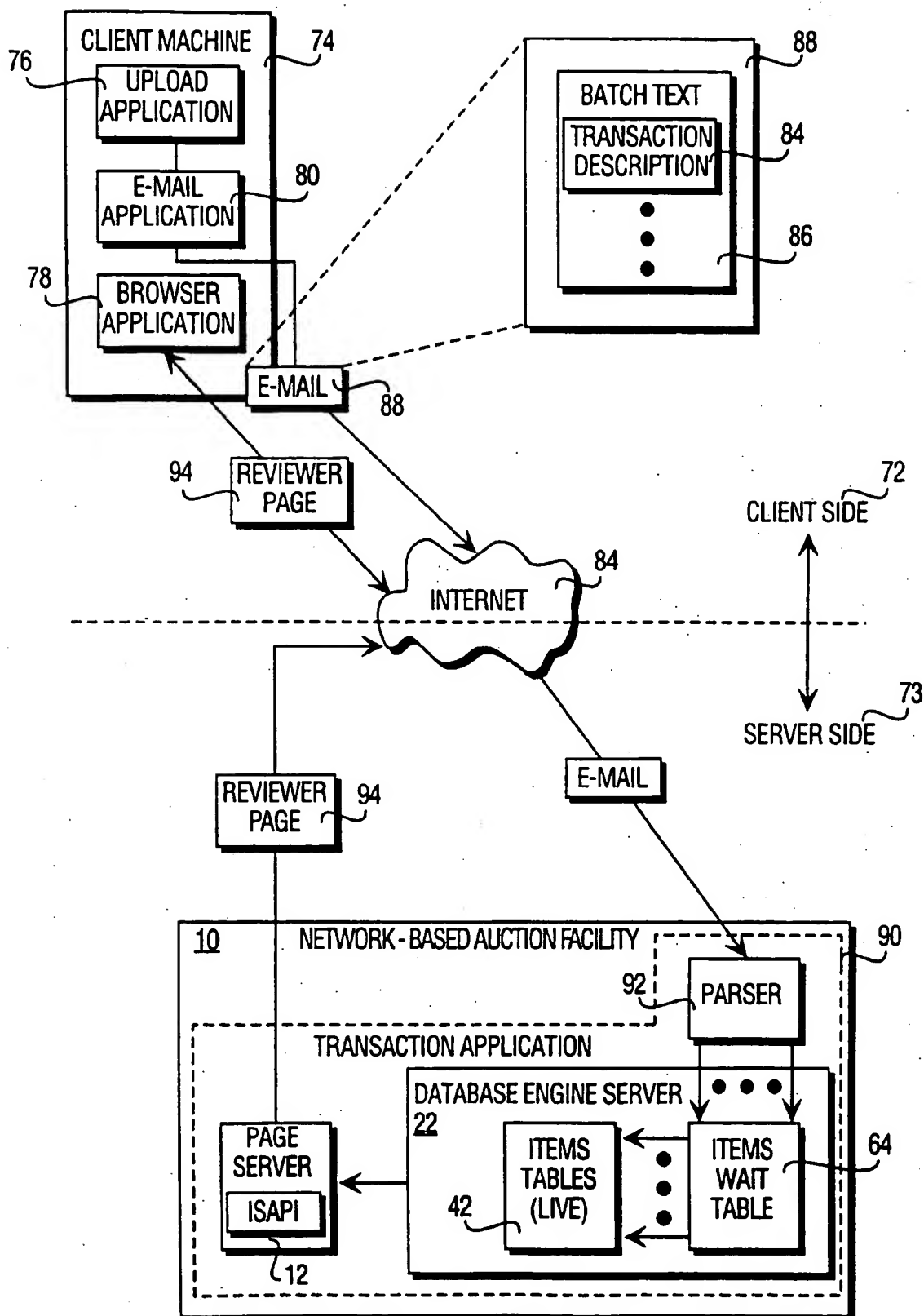
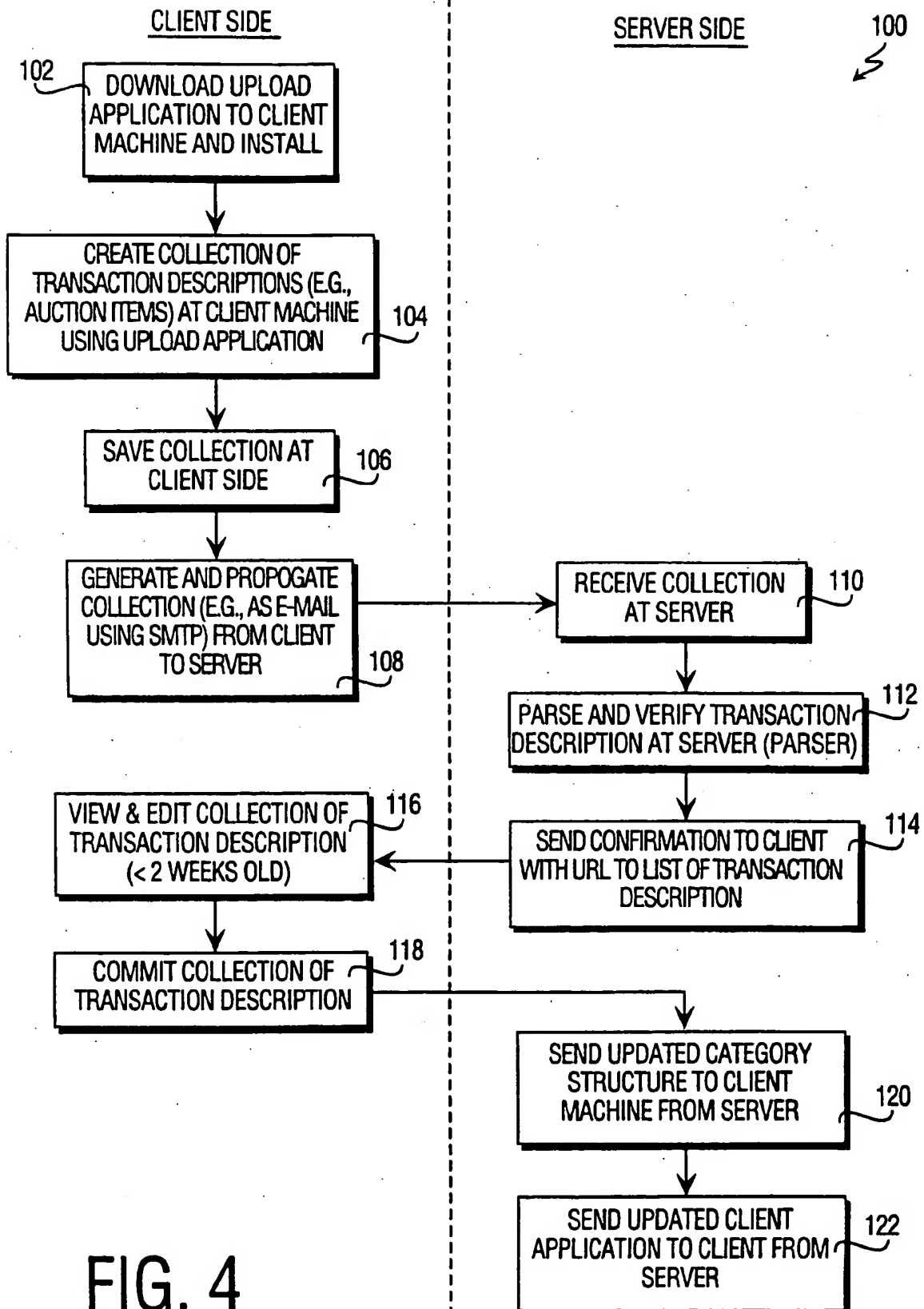


FIG. 3

4/24



5/24

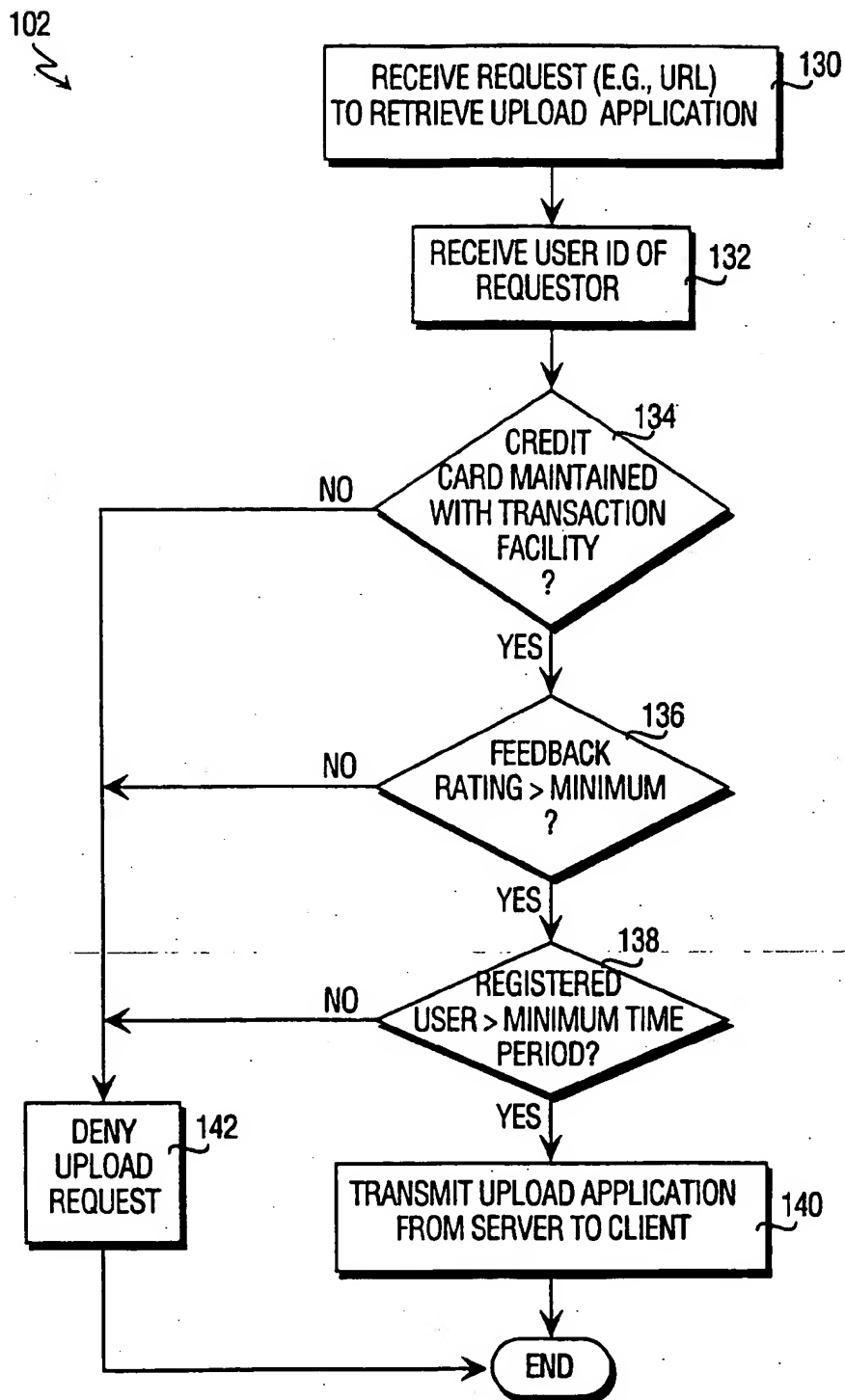


FIG. 5

6/24

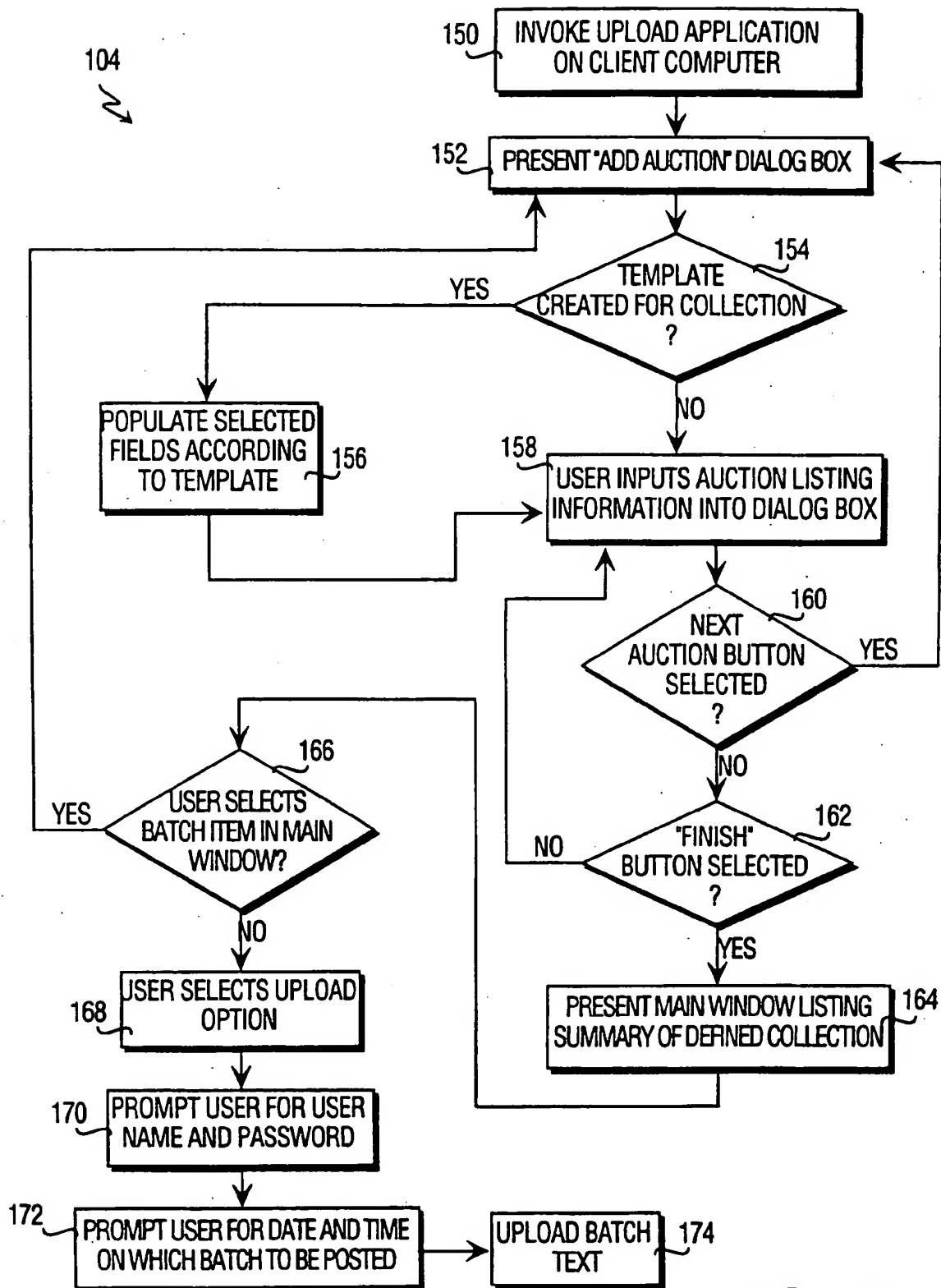


FIG. 6

7/24

180 ↗

Add Auction

Description

One-line description:

Narrative description:

Item picture URL:

Item category:

Feature:

Email notification of new bids: ☒

Pricing and Quantity

Minimum bid (US\$):

Quantity:

Sell as a block: ☐

Reserve Auction: ☐

Reserve Price (US\$):

No. of Reposts:

Auction Duration: day(s)

Payment & Shipping Options

☐ COD Check ☐ USPS

☐ COD M.O. ☐ FedEx

☐ Prepaid Check ☐ UPS

☐ Prepaid M.O. ☐ RPS

☐ Visa/MasterCard ☐ Airborne

☐ Discover

☐ Amer. Express

☐ Diner's Club

FIG. 7

9/24

86
↙

<BULK>
<BULK_EMAIL>bob@twinpeaks.com</BULK_EMAIL>
<BULK_VERSION>2</BULK_VERSION>
<BULK_ITEM> 220
<BULK_ITEM_DESC>
this is the item's description.
<BULK_ITEM_DESC>
title: pete's sofa
category: 234
boldface: yes
featured: n
featured_category: n
location: san jose
picture_url: http://spies.com/~helme/sofa.jpg
quantity: 1
reserve_price: 25.00
minimum_bid: 1.00
duration: 7
private_auction: n
payment_meth_MO_cashiers:
payment_meth_VISA_MC:
payment_terms_seller:
shipping_terms_home_country:

gallery_featured:
gallery_url: http://spies.com/~helme/sofa.jpg
gift_icon:
zip: 95125

</BULK_ITEM> 222
</BULK>

FIG. 10

10/24

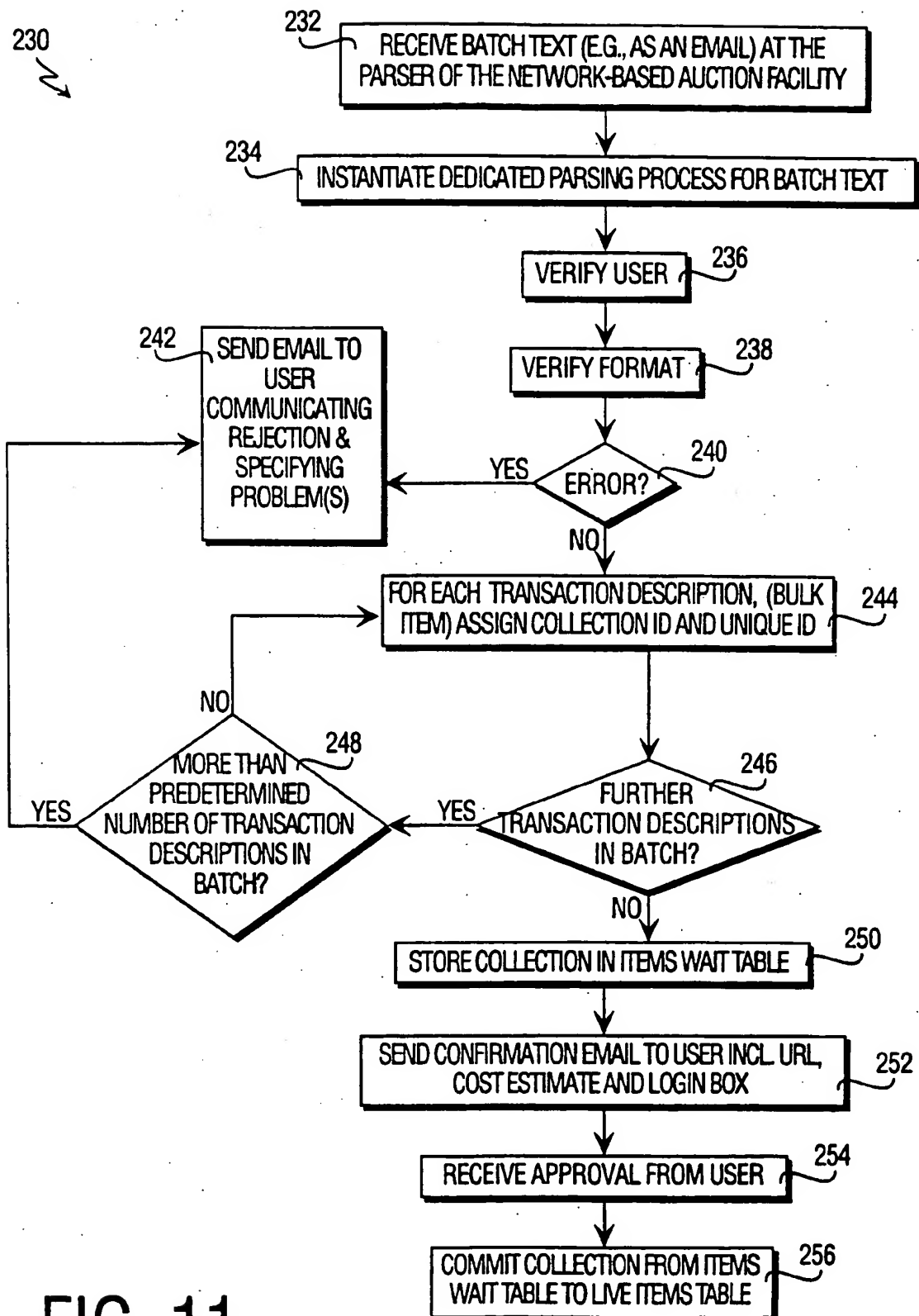


FIG. 11

11/24

Online

**REVIEW COLLECTION SUMMARY**

Below is a summary of you latest item collections. Pending collections are those which have not been posted. Pending items **expire in 2 weeks**, if not submitted.

After you submit a collection of items, each item will be posted as an auction.

Collection Summary for Pete					
ID	Created Date/Time	Expiration Date/Time	Items	Status	Action
2431	06/11/99 02:04:01 PDT	06/25/99 02:04:01 PDT	1	Not yet Committed	delete review commit
2451	06/14/99 19:13:57 PDT	06/14/99 19:13:57 PDT	1	Not yet Committed	delete review commit
2471	06/18/99 15:40:56 PDT	07/02/99 15:40:56 PDT	3	Not yet Committed	delete review commit
2472	06/18/99 18:41:43 PDT	07/02/99 18:41:43 PDT	3	Not yet Committed	delete review commit
2473	06/18/99 18:46:26 PDT	07/02/99 18:46:26 PDT	0	Not yet Committed	delete review commit
2475	06/25/99 13:12:07 PDT	07/09/99 13:12:07 PDT	1	Not yet Committed	delete review commit
		07/09/99 14:41:59 PDT	0	Not yet Committed	delete review commit

Collection Summary for Pete Continued on Fig. 12B...

FIG. 12A

12/24

2475	06/25/99 13:12:07 PDT	07/09/99 14:41:59 PDT	0	Not yet Committed	delete	review	commit
2477	06/25/99 14:41:59 PDT	07/09/99 14:41:59 PDT	0	Not yet Committed	delete	review	commit
2499	06/28/99 16:53:34 PDT	07/12/99 16:53:34 PDT	0	Not yet Committed	delete	review	commit
2514	06/28/99 18:13:52 PDT	07/12/99 18:13:52 PDT	0	Not yet Committed	delete	review	commit
2515	06/28/99 18:14:23 PDT	07/12/99 18:14:23 PDT	1	Not yet Committed	delete	review	commit
2516	06/28/99 18:17:38 PDT	07/12/99 18:17:38 PDT	0	Not yet Committed	delete	review	commit
ID	Created Date/Time	Expiration Date/Time	Items	Status	Action		

Collection Summary for Pete continued from Fig. 12A...

FIG. 12B

13/24

Online Reviewer

**Review Collection**

All of the items in the collection are shown below

Carefully review each item.

300


 302

 304

All Items in Collection #3900

Created Date/Time: 12/15/99 18:09:30 PST

Expiration Date/Time: 12/29/99 18:09:30 PST

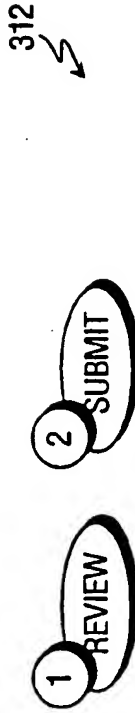
TEST ITEM 1 - DO NOT BID Item #16534			306	308	310
Starts at: \$1.00	Duration: 7	Quantity: 5	Delete Item	Edit Item	Preview Item
Category: <u>Collectibles:Tobacciana:General</u>					

TEST ITEM 1 - DO NOT BID Item #16535					
Starts at: \$1.00	Duration: 7	Quantity: 5	Delete Item	Edit Item	Preview Item
Category: <u>Collectibles:Tobacciana:General</u>					

TEST ITEM 1 - DO NOT BID Item #16536					
Starts at: \$1.00	Duration: 7	Quantity: 5	Delete Item	Edit Item	Preview Item
Category: <u>Collectibles:Tobacciana:General</u>					

FIG. 12C

14/24



Online

APPROVE AND SUBMIT A COLLECTION

Now that you have reviewed your collection, you can approve and submit it by clicking on the approve button at the bottom of the page.

After you submit this collection, you can return to the collection, you can return to the Collection Overview Page to select another collection to review and submit.

314

SUMMARY OF PENDING BATCHED LISTING				
COLLECTION: 3900				
COLLECTION ITEM NUMBER	TITLE	STARTING PRICE	# OF ITEMS	FEE
3900-16534	TEST ITEM 1 - DO NOT BID	\$1.00	5	\$272.30
3900-16535	TEST ITEM 1 - DO NOT BID	\$1.00	5	\$272.30
3900-16536	TEST ITEM 1 - DO NOT BID	\$1.00	5	\$272.30
TOTAL COLLECTION FEE:				\$816.90

Note: the above item IDs will no longer be valid once the items are committed to auction. At that point new IDs will be assigned.

Once you have reviewed the items in this collection and wish to start all of the auctions, click on the Approve button below.
CAUTION! After you click on this button, it may take several minutes to process and start your auctions. Some browsers may time out, before we provide you with an on-screen confirmation. If this happens, your collection of auctions will be started! You will receive an email confirmation shortly. Do not go back and press the approve button again. Doing so may cause duplicate entries.

APPROVE 316

FIG. 12D

15/24

320


Online Reviewer



Your collection is being processed. Please keep this window until processing is done. Items will appear below as they are processed. When all items are processed, a "Completed" message appears at the bottom of the page. For long collections scroll down to view.

Items Started in Auction:

ID Number	Title	Ending Date
152299	TEST ITEM 1 - DO NOT BID	01/31/00 15:36:19
152300	TEST ITEM 1 - DO NOT BID	01/31/00 15:36:20
152301	TEST ITEM 1 - DO NOT BID	01/31/00 15:36:22

Completed! Your items have been posted!

An email will be sent to you confirming your postings.

[Return to collection summary](#)

FIG. 12E

16/24

322
↘

Online Reviewer

1

REVIEW

2

SUBMIT

Preview Item

Carefully review the item.

[Return to collection](#)

Preview of Item # 3900 - 16534

1 of 3 [▷Next](#)[Delete Item](#)[Edit Item](#)**TEST ITEM 1 - DO NOT BID**

in Collectables: Tobacciana: General

Starts at £1.00

Quantity 5

Duration 7

First bid

TBD

#of bids

0 (bid history)

Location

Falcon Heights

Started TBD

Ends TBD

 (mail this auction to a friend) (request a gift alert)Seller pete(15) ☆[\(view seller's other auctions\)](#) [\(ask seller a question\)](#) ☆

High Bid --

Payment Money Order/Cashiers Checks, Online Escrow, See item description for payment methods accepted

Shipping Seller pays for shipping. Seller shipd to home country only, See item description for shipping charges

Revise Seller, if this item has received no bids, you may revise it**DESCRIPTION****DO NOT BID ON THIS!****FIG. 12F**

17/24

Online

1

REVIEW

2

SUBMIT

EDIT ITEM

Enter changes, and select the keep changes button below when done

EDIT ITEM #3900 - 16534

DELETE ITEM

Title
required

TEST ITEM - DO NOT BID

(45 characters max; no HTML tags, asterisks, or quotes as the interfere with Search) see tips.

if you prefer the old-style method of choosing a category, click here.

Category required.

You have chosen category # 133

Just click in the boxes below from left to right until you have found the appropriate category for your item.
The chosen category number will appear in the small box to indicate that you have made a valid selection.

Antiques & Art →

Books, Movies, Music →

Coins & Stamps →

Collectibles →

Computers →

Dolls, Doll Houses →

Jewelry, Gemstones →

Photo & Electronics →

Pottery & Glass →

Sports →

Toys, Bean Bag Plush →

Everything Else →

Advertising →

Animals →

Animation Art →

Animation Characters →

Art →

Autographs →

Banks →

Barber Shop, Shaving

Barware →

Bears →

Bottles →

Breweriana →

General

Ashtrays

Cigar

Lighters →

Match Holders

Pipes →

Tobacco Cards

Description
required

```
<html><h1><font color=red> DO NOT BID ON THIS!
</font></h1> (please)</html>
```

use basic html tags to spruce up you listing. see tips


FIG. 12G

18/24

321

You can use basic


You can add links to additional photos, but enter your primary photo in the Picture URL below. If you want more than one photo for your item, insert it's URL in the Description section in the following format:

Picture URL 
 optional It's easy! Learn the basics in the [tutorial](#), and enter your URL here.

The Gallery
 Gallery now has
 search -- don't let
 your item get left out!
 Items in the Gallery
 get 25% to 200%
 more bids.
[learn more](#)

☐ Do not include my item in the Gallery

☐ Add my item to the Gallery (only \$0.25)

☒ Feature my item in the Gallery (Featured fee of \$19.95) 


If you leave the Gallery URL empty, your Pic URL will be used as your
 Gallery URL. (only jpg, bmp, or tif files can be used in the Gallery.
 Please note that gif files will not appear in the Gallery.

Make your item stand out and get more bids! Try these winning options:

Boldface Title? ☐ \$2.00 charge

Featured? ☒ \$99.95 charge [learn more](#)

Featured in Category? ☒ \$14.95 charge [learn more](#)

Great Gift Icon?  \$1.00 charge [learn more](#)

Item Location
 required
 City, region (e.g., San Jose, CA)

Zip or Postal Code (e.g., CB4 4WS)

United Kingdom

FIG. 12H

19/24

324
↘

Payment Methods	<input checked="" type="checkbox"/> Money Order/Cashiers Check	<input type="checkbox"/> Personal Check	<input type="checkbox"/> Visa/Master Card
Choose all that you will accept	<input type="checkbox"/> COD (collect on delivery)	<input checked="" type="checkbox"/> On-line Escrow	<input type="checkbox"/> American Express
	<input checked="" type="checkbox"/> See Item Description	<input type="checkbox"/> Other	<input type="checkbox"/> Discover
Where will you ship?	To <u>ship internationally</u> , you must sell your items in US\$ see tips		
Who pays for shipping?	<input checked="" type="checkbox"/> Seller pays shipping	<input type="checkbox"/> Buyer pays fixed amount	
	<input type="checkbox"/> Buyer pays actual shipping cost	<input checked="" type="checkbox"/> See item description	

Quantity required	<input type="text" value="5"/>	
	if quantity is more than 1, then you will have a <u>Dutch auction</u> . see tips	
Minimum Bid required	<input type="text" value="1.00"/>	per item see tips
	(e.g., 2.00 -- Please do not include commas or currency symbols, such as \$)	
Duration required	<input type="text" value="7"/>	<input type="button" value="v"/>

Reserve Price optional	<input type="text" value="5"/>	see tips
	(e.g., 15.00 -- Please do not include commas or currency symbols, such as \$)	
Private Auction? optional	<input type="checkbox"/> Please don't use this unless you have a specific reason. learn more	

Carefully edit the item

Fees: You will be advised of all fees when you approve the entire collection

FIG. 121

20/24

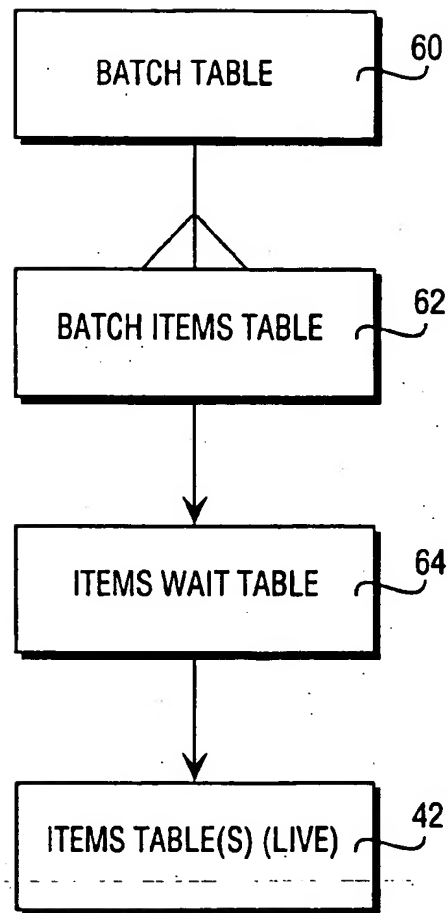


FIG. 13A

21/24

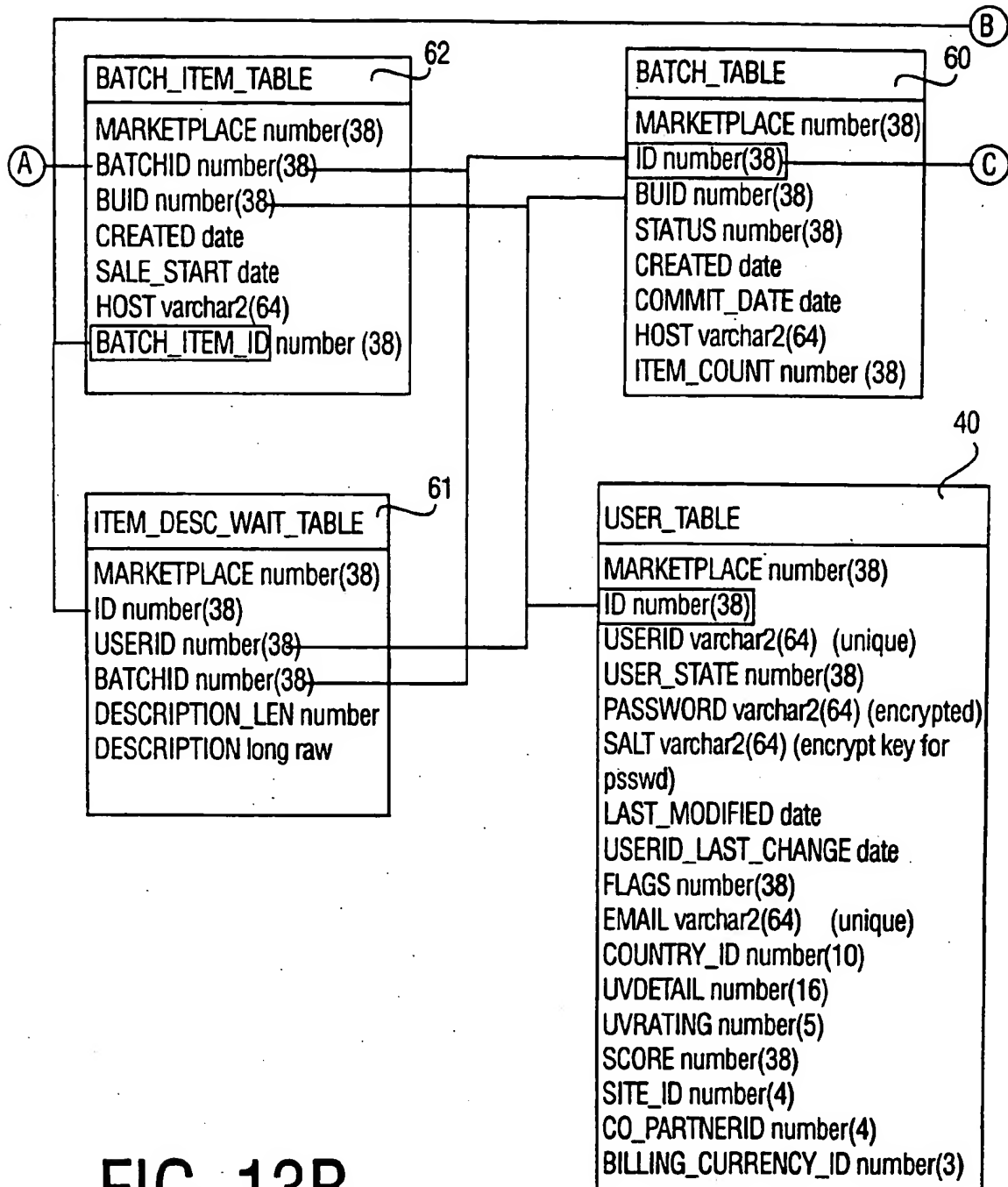


FIG. 13B

22/24

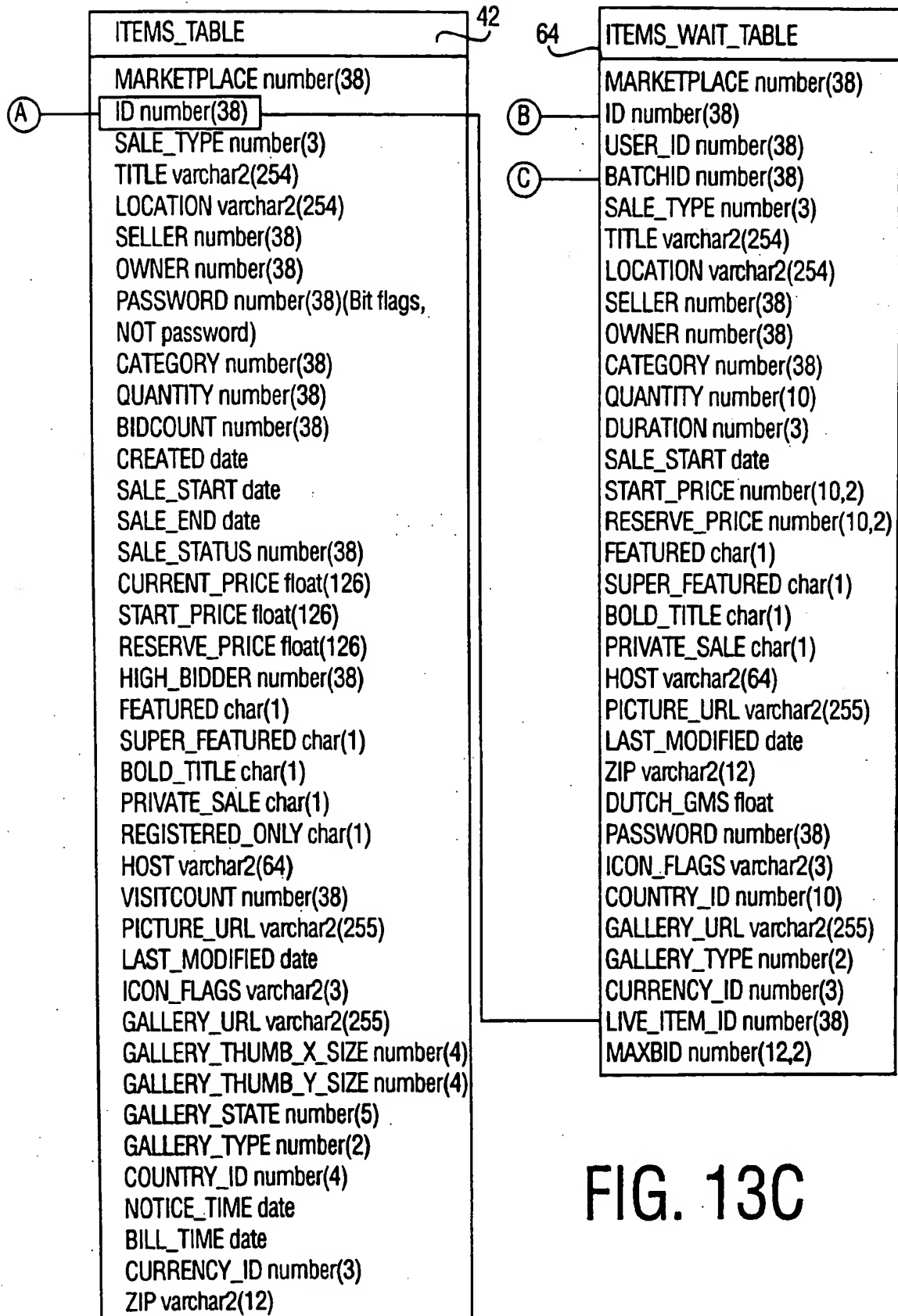


FIG. 13C

23/24

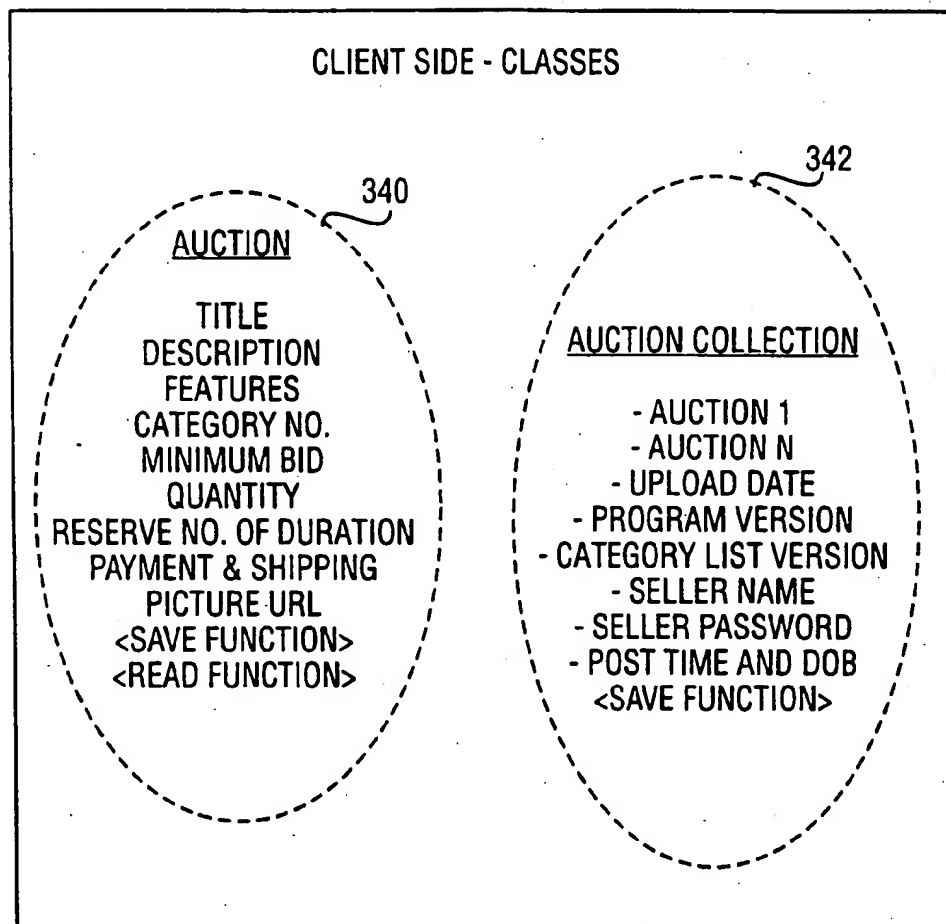


FIG. 14

24/24

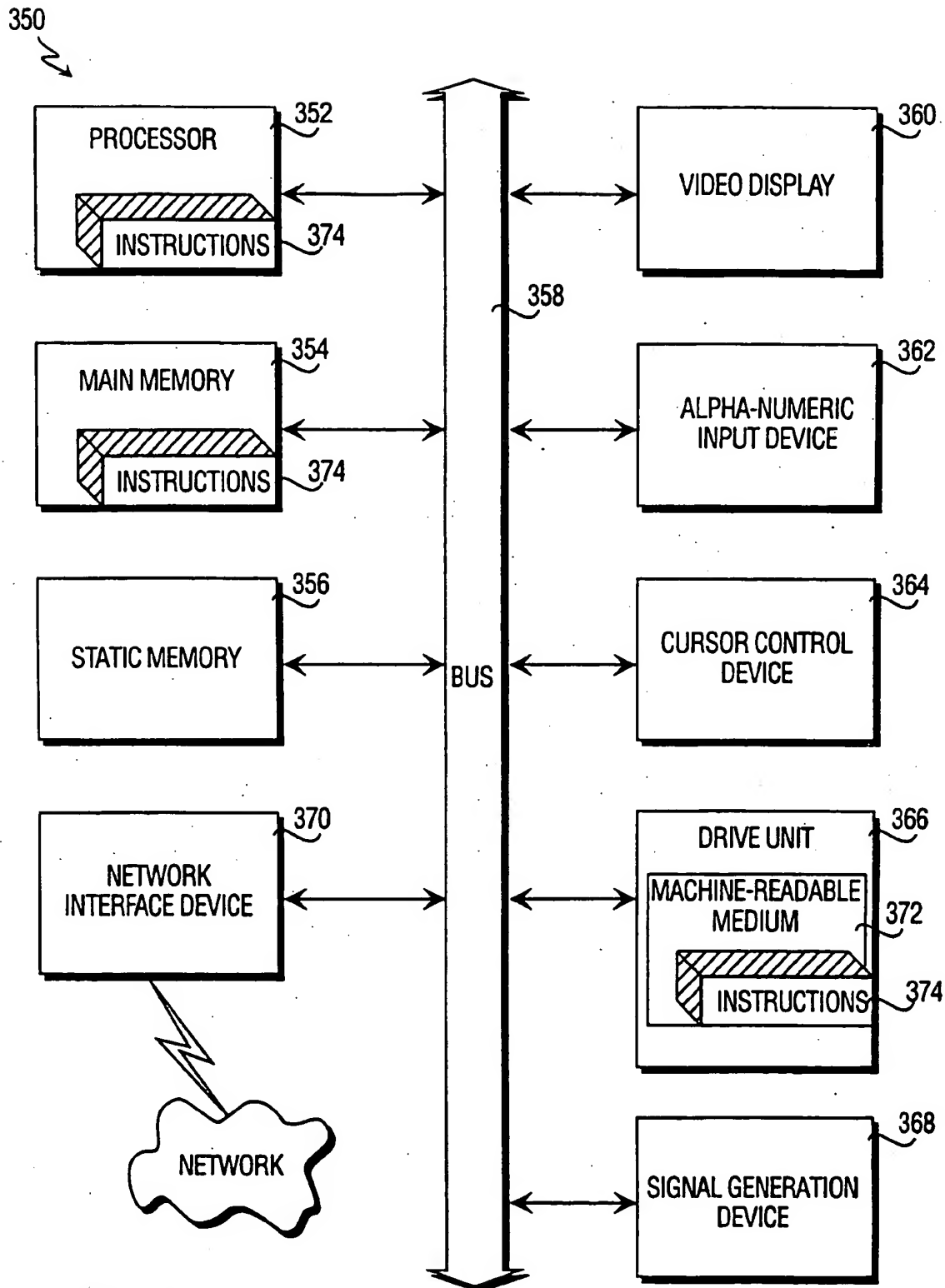


FIG. 15

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/17136

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B42D 15/00; G06F 17/60; H04L 9/00; H04M 11/00

US CL : 705/1, 26, 27, 37, 80

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/1, 26, 27, 37, 80

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,799,285 A (KLINGMAN) 25 August 1998, figures 1, 2, 4.	1-70
Y	US 5,803,500 A (MOSSBERG) 08 September 1998, entire document.	1-70
A	US 5,715,314 A (PAYNE et al) 03 February 1998, entire document.	1-70
A	US 5,873,069 A (REUHL et al) 16 February 1999, entire document.	1-70

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

03 AUGUST 2000

Date of mailing of the international search report

16 NOV 2000

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

TODD VOELTZ

Telephone No. (703) 305-9714

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/17136

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

STN,EAST

creating,uploading,putting,generating, defining,inputting,auction, offer,sale.listing,internet or world wide web,
web,network,www